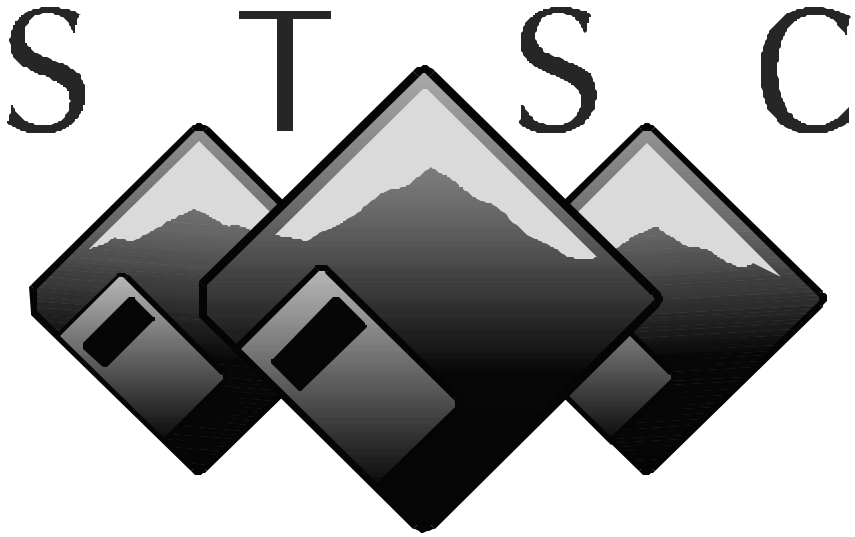
CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1



Mapping

This mapping was performed by the
USAF Software Technology Support Center (STSC)

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INTRODUCTION

The release of any new or revised Capability Maturity Model has always been accompanied with the questions "What does this mean to me?" and "How does this compare to what I am already doing with regard to an existing model?" The following mappings of the Capability Maturity Model for Software/Integrated Product and Process Development/Supplier Section (SW-CMM/IPPD/SS) Version 1.1 to and from the Capability Maturity Model-Integrated – Systems Engineering/Software (CMMI-SE/SW/IPPD/SS) Version 1.1 is the best effort of the Software Technology Support Center to help you answer these questions.

The mappings were completed by the United States Air Force's Software Technology Support Center (STSC). The authors had no involvement with the development of the CMMI-SE/SW/IPPD/SS; hence they had no preconceived notion of the intended mapping by the CMMI-SE/SW development team. These mappings are based on the author's understanding of the SW-CMM/IPPD/SS Version 1.1 and the CMMI-SE/SE Version 1.1

The authors did their best not to "stretch" to show a mapping between the CMMs. On the other hand, there may have been times when a mapping could have been shown but was not

A few notable items. The phrase "…according to a documented procedure" so prevalent in the SW-CMM is absent in the CMMI-SE/SW/IPPD/SS. The CMMI-SE/SW/IPPD/SS places greater emphasis on "established and maintained" whereas the SW-CMM often only states "established."

Both the continuous and staged versions of CMMI-SE/SW/IPPD/SS Version 1.1 are available in .pdf format on the SEI web site:

http://www.sei.cmu.edu/publications/documents/02.reports/02tr011.html

The Capability Maturity Model for Software (SW-CMM) Version 1.1 is also available on the SEI web site as CMU/SEI-93-TR-024 and CMU/SEI-93-TR-025.

http://www.sei.cmu.edu/about/website/indexes/siteIndex/siteIndexTRnum.html#1993

SW-CMM KEY PROCESS AREAS

ALPHABETICAL BY ABBREVIATION

DP - Defect Prevention
IC - Intergroup Coordination
ISM - Integrated Software Management
OPD - Organizational Process Definition
OPF - Organizational Process Focus
PCM - Process Change Management
PR - Peer Reviews
QPM - Quantitative Process Management
RM - Requirements Management
SCM - Software Configuration Management
SPE - Software Product Engineering
SPP - Software Project Planning
SPT&O - Software Project Tracking and Oversight
SQA - Software Quality Assurance
SQM - Software Quality Management
SSM - Software Subcontract Management
TCM - Technology Change Management
TP - Training Program

ORDER OF OCCURRENCE BY MATURITY LEVEL

Level 2

RM - Requirements Management
SPP - Software Project Planning
SPT&O - Software Project Tracking and Oversight
SSM - Software Subcontract Management
SQA - Software Quality Assurance
SCM - Software Configuration Management

Level 3

OPF - Organizational Process Focus
OPD - Organizational Process Definition
TP - Training Program
ISM - Integrated Software Management
SPE - Software Product Engineering
IC - Intergroup Coordination
PR - Peer Reviews

Level 4

QPM - Quantitative Process Management
SQM - Software Quality Management

Level 5

DP - Defect Prevention
TCM - Technology Change Management
PCM - Process Change Management

CMMI-SE/SW/IPPD/SS SPECIFIC PRACTICES

ALPHABETICAL BY ABBREVIATION

CAR - Causal Analysis and Resolution
CM - Configuration Management
DAR - Decision Analysis and Resolution
IPM - Integrated Product Management
ISM - Integrated Supplier Management
M&A - Measurement and Analysis
OID - Organizational Innovation and Deployment
OPD - Organizational Process Definition
OPF - Organizational Process Focus
OPP - Organizational Process Performance
OT - Organizational Training
PI - Product Integration
PMC - Product Monitoring and Control
PP - Project Planning
PPQA - Process and Product Quality Assurance
QPM - Quantitative Project Management
RD - Requirements Development
RM - Requirements Management
RSKM - Risk Management
SAM - Supplier Agreement Management
TS - Technical Solution
VAL - Validation
VER - Verification

GP - Generic Practice The generic practices are similar to the common features of Commitment to Perform, Ability to Perform, Measurement and Analysis, and Verifying Implementation found in SW-CMM V. 1.1

ALPHABETICAL BY MATURITY LEVEL

(Staged Representation)

Level 2	Level 3	Level 4	Level 5
CM	DAR	OPP	CAR
M&A	IPM	QPM	OID
PMC	ISM		
PP	OPD		
PPQA	OPF		
RM	OT		
SAM	PI		
	RD		
	RSKM		
	TS		
	VAL		
	VER		

ALPHABETICAL BY PROCESS AREA CATEGORY

(Continuous Representation)

Process Management	Project Management	Engineering	Support
OID	IPM	PI	CAR
OPD	ISM	RD	CM
OPF	PMC	RM	DAR
OPP	PP	TS	M&A
OT	QPM	VAL	PPQA
	RSKM	VER	
	SAM		

HOW TO READ THE MAPS

MAPPING OF CMMI-SE/SW/IPPD/SS V 1.1TO SW-CMM V 1.1

The first column identifies the process area category.

The second column identifies the CMMI process area.

The third column lists the CMMI process area goal

The fourth column lists the CMMI specific practice associated with the goal or the generic practices for the maturity level.

The fifth column provides the associated SW-CMM key process area goal or common feature. See the SW-CMM Key Process Areas section for the abbreviations used. Additional abbreviations for the common features are:

Co - Commitment to perform
Ab - Ability to perform
Ac - Activities performed
Meas - Measurements
Ver - Verification

For example, a notation of SPP Ac 1,4 refers to the Software Project Planning key process area, activities 1 and 4.

The sixth column provides our evaluation of how the two CMMs compare. No notation indicates equivalence.

MAPPING OF SW-CMM V 1.1 TO CMMI-SE/SW/IPPD/SS V 1.1

The first column identifies the maturity level.

The second column identifies the SW-CMM key process area.

The third column is a header column for the goals and common features.

The fourth column lists the goals and common features of the key process area.

The fifth column provides the mapping to CMMI-SE/SW/IPPD/SS. For example, a notation of SAM G2 SP1,2 refers to the Supplier Agreement Management process area, goal 2, and specific practices 1 and 2. See the CMMI-SE/SW Specific Practices section for the abbreviations used.
Blanks in the fifth column indicate that no mapping was apparent.

The sixth column provides our evaluation of how the two CMMs compare. No notation indicates equivalence.

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2							
	Requirements Management	SG 1	Requirements are managed and inconsistencies with project plans and work products are identified.	RM Goal 1	S		RM SG1
				RM Goal 2	S		RM SG1
			SP 1.1 Develop an understanding with the requirements providers on the meaning of the requirements.	IC Ac 1	S		RM SP 1.1
				SPE Ac 2	M	See subpractice 10	RM SP 1.1
			SP 1.2 Obtain commitment to the requirements from the project participants.	IC Goal 1	S		RM SP 1.2
				RM Ac 1	S		RM SP 1.2
				SPE Ac 2	M		RM SP 1.2
			SP 1.3 Manage changes to the requirements as they evolve during the project.	RM Ac 3	S		RM SP 1.3
				SCM Ac 5	S		RM SP 1.3
				SPE Ac 2	W		RM SP 1.3
				SPE Ac10	W		RM SP 1.3
			SP 1.4 Maintain bi-directional traceability among the requirements and the project plans and work products.	SPE Ac 10	S	Sub-practices 2& 3 elevated to Specific Practice	RM SP 1.4
			SP 1.5 Identify inconsistencies between the project plans and work products and the requirements.	RM Ac 3	M	Sub-practices 2 elevated to Specific Practice	RM SP 1.5
				SPE Ac 10	S		RM SP 1.5
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	RM GG 2
			GP 2.1 Establish and maintain an organizational policy for planning and performing the requirements management process	RM Co 1	S		RM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the requirements management process.		N	Not Directly addressed	RM GP 2.2
			GP 2.3 Provide adequate resources for performing the requirements management process, developing the work products, and providing the services of the process.	RM Ab 3	S		RM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the requirements management process	RM Ab 1	S		RM GP 2.4
			GP 2.5 Train the people performing or supporting the requirements management process as needed.	RM Ab 4	S		RM GP 2.5
			GP 2.6 Place designated work products of the requirements management process under appropriate levels of configuration management.	RM Ac 2	S	Subpractice 1	RM GP 2.6
				SCM Goal 2	W		RM GP 2.6

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Requirements Management (cont.).	GG 2 (cont.)	GP 2.7 Identify and involve the relevant stakeholdersof the requirements management process as planned.		N	Not Directly addressed (See GP 2.2 above)	
			GP 2.8 Monitor and control the requirements management process against the plan for performing the process and take appropriate corrective action.		N	Not Directly addressed (See GP 2.2 above)	RM GP 2.8
			GP 2.9 Objectively evaluate adherence of the requirements management process against its process description, standards, and procedures, and address noncompliance.	RM Ve 3	S		RM GP 2.9
			GP 2.10 Review the activities, status, and results of the requirements management process with higher level management and resolve issues.	RM Ve 1	S		RM GP 2.9
RM Req for Level 3		GG 3	GP 3.1 Establish and maintain the description of a defined requirements management process.	OPD Ac 1	W		RM GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the requirements management process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		RM GP 3.2
Maturity Level 2 (cont.)	Project Planning	SG 1	Estimates of project planning parameters are established and maintained.	SPP Goal 1	S		PP SG1
			SP 1.1 Establish a top-level work breakdown structure (WBS) to estimate the scope of the project.	SPP Ac 7	W	Subpractice 4	PP SP 1.1
				SPP Ac 9	W	Subpractice 2	PP SP 1.1
			SP 1.2 Establish and maintain estimates of the attributes of the work products and tasks.	SPP Ac 9	S		PP SP 1.2
				SPP Ac 10	S		PP SP 1.2
			SP 1.3 Define the project life-cycle phases upon which to scope the planning effort.	SPP Ac 5	S		PP SP 1.3
				SPP Ac 7	W	Subpractice 2	PP SP 1.3
			SP 1.4 Estimate the project effort and cost for the attributes of the work products and tasks based on estimation rationale.	SPP Ac 10	S		PP SP 1.4
				SPP Ac 14	W		PP SP 1.4
		SG 2	A project plan is established and maintained as the basis for managing the project.	SPP Goal 2	S		PP SG 2
				SPP Ac 6	S		PP SG 2
				SPP Ac 7	S		PP SG 2
			SP 2.1 Establish and maintain the project' s budget and schedule.	SPP Ac 7	S	Subpractices 6,8	PP SP 2.1
				SPP Ac 12	S		PP SP 2.1
			SP 2.2 Identify and analyze project risks.	SPP Ac 7	W	Subpractice 9	PP SP 2.2
				SPP Ac 13	S		PP SP 2.2
			SP 2.3 Plan for the management of project data.	ISM Ac 4	W	Subpractice 1	PP SP 2.3
				OPD Ac 5	W		PP SP 2.3
				OPD Ac 6	W		PP SP 2.3
				QPM Ac 1	W		PP SP 2.3
				QPM Ac 2	W		PP SP 2.3

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Project Planning (cont.)	SG 2 (cont.)	SP 2.3 Cont	QPM Ac 3	W		PP SP 2.3
				SPP Ac 7	W		PP SP 2.3
				SPP Ac 8	W		PP SP 2.3
				SPT&O Ac 5	W	by implication	PP SP 2.3
				SPT&O Ac 6	W	by implication	PP SP 2.3
				SPT&O Ac 7	W	by implication	PP SP 2.3
				SPT&O Ac 8	W	by implication	PP SP 2.3
				SPT&O Ac 9	W	by implication	PP SP 2.3
				SPT&O Ac 10	W	by implication	PP SP 2.3
				SPT&O Ac 11	W	by implication	PP SP 2.3
			SP 2.4 Plan for necessary resources to perform the project.	SPE Ab 1	W		PP SP 2.4
				SPP Ac 7	W		PP SP 2.4
				SPP Ac 11	S		PP SP 2.4
				SPP Ac 14	S		PP SP 2.4
			SP 2.5 Plan for knowledge and skills needed to perform the project.	ISM Ac 4	W	Subpractices 7,8	PP SP 2.5
				SPP Ac 7	W		PP SP 2.5
				TP Ac 1	S		PP SP 2.5
			SP 2.6 Plan the involvement of identified stakeholders.	SPP Ac 1	W		PP SP 2.6
				SPP Ac 3	W		PP SP 2.6
				SPP Ac 6	S		PP SP 2.6
				SPTO Ab 1	W		PP SP 2.6
			SP 2.7 Establish and maintain the overall project plan content.	ISM Ac 3	W		PP SP 2.7
				SPP Ac 6	S		PP SP 2.7
				SPP Ac 7	S		PP SP 2.7
				SPT&O Ac 2	W		PP SP 2.7
		SG 3	Commitments to the project plan are established and maintained.	SPP Goal 2	S		PP SG 3
				SPP Goal 3	S		PP SG 3
			SP 3.1 Review all plans that affect the project to understand project commitments.	DP Ac 1	S	Informational materials in each usually direct review by the project.	PP SP 3.1
				PCM Ac 3	W	ditto	PP SP 3.1
				QPM Ac 1	S	ditto	PP SP 3.1
				QPM Ac 2	S		PP SP 3.1
				SCM Ac 1	S	ditto	PP SP 3.1
				SCM Ac 2	S	ditto	PP SP 3.1
				SPP Ac 3	S	ditto	PP SP 3.1
				SPP Ac 4	S	ditto	PP SP 3.1
				SPP Ac 6	S	ditto	PP SP 3.1
				SQA Ac 1	S	ditto	PP SP 3.1
				SQA Ac 2	S	ditto	PP SP 3.1

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Project Planning (cont.)	SG 3 (cont.)		SQM Ac 1	S	ditto	PP SP 3.1
			SP 3.1 Cont.	SQM Ac 2	S	ditto	PP SP 3.1
				SSM Ac 1	W	ditto	PP SP 3.1
				TCM Ac 1	W	ditto	PP SP 3.1
				TP Ac 1	W	ditto	PP SP 3.1
			SP 3.2 Reconcile the project plan to reflect available and estimated resources.	SPP Ac 1	W	Not directly addressed	PP SP 3.2
				SPP Ac 4	W		PP SP 3.2
				SPP Ac 6	W		PP SP 3.2
				SPP Ac 12	W	Subpractice 3	PP SP 3.2
				SPP Ac 14	W		PP SP 3.2
			SP 3.3 Obtain commitment from relevant stakeholders responsible for performing and supporting plan execution.	IC Ac 3	S		PP SP 3.3
				IC Ac4	S		PP SP 3.3
				IC Ac 6	S		PP SP 3.3
				SPP Ac 6	S		PP SP 3.3
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the project planning process	SPP Co 2	S		PP GP 2.1
			GP 2.2 Establish and maintain the plan for performing the project planning process.		N	SW-CMM v1.1 doesn't specify a project planning plan	
			GP 2.3 Provide adequate resources for performing the project planning process, developing the work products, and providing the services of the process.	SPP Ab 3	S		PP GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the project planning	SPP Ab 2	S		PP GP 2.4
				SPP Co 1	S		PP GP 2.4
			GP 2.5 Train the people performing or supporting the project planning process as needed.	SPP Ab 4	S		PP GP 2.5
			GP 2.6 Place designated work products of the project planning process under appropriate levels of configuration management.	SCM Goal 2	W		PP GP 2.6
				SPP Ac 15	S		PP GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the project planning process as planned.		N	See GP 2.2	
			GP 2.8 Monitor and control the project planning process against the plan for performing the process and take appropriate corrective action.		N	See GP 2.2	
			GP 2.9 Objectively evaluate adherence of the project planning process against its process description, standards, and procedures, and address noncompliance.	SPP Ve 3	S		PP GP 2.9
			GP 2.10 Review the activities, status, and results of the project planning process with higher level management and resolve issues.	SPP Ve 1	S		PP GP 2.10

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
PP Req for Level 3	Project Planning (cont.)	GG 3	GP 3.1 Establish and maintain the description of a defined project planning process.	OPD Ac 1	W		PP GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the project planning process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		PP GP 3.2
Maturity Level 2 (cont.)	Project Monitoring and Control	SG 1	Actual performance and progress of the project is monitored against the project plan.	SPT&O Goal 1	S		PMC SG 1
			SP 1.1 Monitor the actual values of the project planning parameters against the project plan.	SPT&O Ac 1	S		PMC SP 1.1
				SPT&O Ac 5	S		PMC SP 1.1
				SPT&O Ac 6	S		PMC SP 1.1
				SPT&O Ac 7	S		PMC SP 1.1
				SPT&O Ac 8	S		PMC SP 1.1
				SPT&O Ac 9	S		PMC SP 1.1
			SP 1.2 Monitor commitments against those identified in the project plan.	SPT&O Ac 1	W		PMC SP 1.2
				SPT&O Ac 8	M		PMC SP 1.2
				SPT&O Ac 12	W		PMC SP 1.2
				SPT&O Ac 13	M		PMC SP 1.2
			SP 1.3 Monitor risks against those identified in the project plan.	ISM Ac 10	S		PMC SP 1.3
				SPT&O Ac 10	S		PMC SP 1.3
			SP 1.4 Monitor the management of project data against the project plan.	SPT&O Ac 11	W		PMC SP 1.4
				SPT&O Ve 3	W		PMC SP 1.4
			SP 1.5 Monitor stakeholder involvement against the project plan.	ISM Ac 9	W		PMC SP 1.5
				ISM Ac 11	W		PMC SP 1.5
				SPT&O Ac 12	W		PMC SP 1.5
				SPT&O Ac 13	S		PMC SP 1.5
			SP 1.6 Periodically review the project's progress, performance, and issues.	ISM Ac 11	S		PMC SP 1.6
				SPT&O Ac 4	W		PMC SP 1.6
				SPT&O Ac 6	S		PMC SP 1.6
				SPT&O Ac 8	S		PMC SP 1.6
				SPT&O Ac 9	S		PMC SP 1.6
				SPT&O Ac 12	S		PMC SP 1.6
				SPT&O Ac 13	S		PMC SP 1.6
			SP 1.7 Review the accomplishments and results of the project at selected project milestones.	SPT&O Ac 12	S		PMC SP 1.7
				SPT&O Ac 13	S		PMC SP 1.7
		SG 2	Corrective actions are managed to closure when the project's performance or results deviate significantly from the plan.	SPT&O Goal 2	S	SW CMM more rigorous	PMC SG 2
			SP 2.1 Collect and analyze the issues and determine the corrective actions necessary to address the issues.	SPT&O Ac 5	S		PMC SP 2.1
				SPT&O Ac 6	S		PMC SP 2.1

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Project Monitoring and Control (cont.)	SG 2 (cont.)	SP 2.1 Cont.	SPT&O Ac 7	S		PMC SP 2.1
				SPT&O Ac 8	S		PMC SP 2.1
				SPT&O Ac 9	S		PMC SP 2.1
			SP 2.2 Take corrective action on identified issues.	SPT&O Ac 5	S		PMC SP 2.2
				SPT&O Ac 6	S		PMC SP 2.2
				SPT&O Ac 7	S		PMC SP 2.2
				SPT&O Ac 8	S		PMC SP 2.2
				SPT&O Ac 9	S		PMC SP 2.2
			SP 2.3 Manage corrective actions to closure.	SPT&O Ac 9	S	"To closure" not mentioned in Ac 5-8	PMC SP 2.3
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the project monitoring and control process	SPT&O Co 2	M	CMM doesn't address planning the PT&O Process	PMC GP 2.1
			GP 2.2 Establish and maintain the plan for performing the project monitoring and control process.		N	SW-CMM v1.1 doesn't directly address a plan for performing the SPT&O process.	
			GP 2.3 Provide adequate resources for performing the project monitoring and control process, developing the work products, and providing the services of the process.	SPT&O Ab 3	S		PMC GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the project monitoring and control process.	SPT&O Ab 2	S		PMC GP 2.4
				SPT&O Co 1	S		PMC GP 2.4
			GP 2.5 Train the people performing or supporting the project monitoring and control process as needed.	SPT&O Ab 4	S		PMC GP 2.5
			GP 2.6 Place designated work products of the project monitoring and control process under appropriate levels of configuration management.	SCM Goal 2	W		PMC GP 2.6
				SPT&O Ac 2	S	Subpractice 4	PMC GP 2.6
				SPT&O Ac 11	S	Subpractice 2	PMC GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the project monitoring and control process as planned.	ISM Ac 9	W		PMC GP 2.7
				ISM Ac 11	W		PMC GP 2.7
				SPT&O Ac 12	S		PMC GP 2.7
				SPT&O Ac 13	S		PMC GP 2.7

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Project Monitoring and Control (cont.)	GG 2 cont	GP 2.8 Monitor and control the project monitoring and control process against the plan for performing the process and take appropriate corrective action.		N	SW-CMM v1.1 doesn't directly address a plan for performing the SPT&O process.	
			GP 2.9 Objectively evaluate adherence of the project monitoring and control process against its process description, standards, and procedures, and address noncompliance.	SPT&O Ve 3	S		PMC GP 2.9
			GP 2.10 Review the activities, status, and results of the project monitoring and control process with higher level management and resolve issues.	SPT&O Ve 1	S		PMC GP 2.10
PMC Req for Level 3		GG 3	GP 3.1 Establish and maintain the description of a defined project Monitoring and control process.	OPD Ac 1	W		PMC GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the project monitoring and control process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		PMC GP 3.2
Maturity Level 2 (cont.)	Supplier Agreement Management	SG 1	Agreements with the suppliers are established and maintained.	SSM Goal 2	S		SAM SG 1
				SSM Goal 3	W		SAM SG 1
			SP 1.1 Determine the type of acquisition for each product or product component to be acquired.		N	Not addressed	
			SP 1.2 Select suppliers based on an evaluation of their ability to meet the specified requirements and established criteria.	SSM Ac 2	S		SAM SP 1.2
				SSM Goal 1	S		SAM SP 1.2
			SP 1.3 Establish and maintain formal agreements with the supplier.	SSM Ac 3	S		SAM SP 1.3
				SSM Ac 6	W		SAM SP 1.3
		SG 2	Agreements with the suppliers are satisfied by both the project and the supplier.	SSM Ac 3	S		SAM SG 2
				SSM Ac 7	S	Subpractices 5,6	SAM SG 2
				SSM Ac 8	S		SAM SG 2
			SP 2.1 Review candidate COTS products to ensure they satisfy the specified requirements that are covered under a supplier agreement.		N	Not directly addressed	
			SP 2.2 Perform activities with the supplier as specified in the supplier agreement.	SSM AC 3	S		SAM SP 2.2
				SSM AC 7	S		SAM SP 2.2
				SSM AC 8	S		SAM SP 2.2
				SSM AC 9	S		SAM SP 2.2
				SSM AC 13	S		SAM SP 2.2
			SP 2.3 Ensure that the supplier agreement is satisfied before accepting the acquired product.	SSM Ac 12	S		SAM SP 2.3
			SP 2.4 Transition the acquired products from the supplier to the project.		N	Not addressed	
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Supplier Agreement Management (cont.)	GG 2 cont	GP 2.1 Establish and maintain an organizational policy for planning and performing the supplier agreement management process.	SSM Co 1	M	CMM doesn't address planning the SSM Process	SAM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the supplier agreement management process.		N	SW-CMM v1.1 doesn't specify a plan for performing the SSM process	
			GP 2.3 Provide adequate resources for performing the supplier agreement management process, developing the work products, and providing the services of the process.	SSM Ab 1	M		SAM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the supplier agreement management process	SSM Co 2	S		SAM GP 2.4
			GP 2.5 Train the people performing or supporting the supplier agreement management process as needed.	SSM Ab 2	S		SAM GP 2.5
				SSM Ab 3	S		SAM GP 2.5
			GP 2.6 Place designated work products of the supplier agreement management process under appropriate levels of configuration management.	SCM Goal 2	W		SAM GP 2.6
				SSM Ac 1	W	Subpractice 3	SAM GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the supplier agreement management process as planned.	SSM Ac 1	W		SAM GP 2.7
				SSM Ac 3	W		SAM GP 2.7
				SSM Ac 7	S		SAM GP 2.7
				SSM Ac 8	S		SAM GP 2.7
				SSM Ac 9	S		SAM GP 2.7
			GP 2.8 Monitor and control the supplier agreement management process against the plan for performing the process and take appropriate corrective action.	SSM Me 1	S		SAM GP 2.8
			GP 2.9 Objectively evaluate adherence of the supplier agreement management process against its process description, standards, and procedures, and address noncompliance.	SSM Ve 3	S		SAM GP 2.9
			GP 2.10 Review the activities, status, and results of the supplier agreement management process with higher level management and resolve issues.	SSM Ve 1	S		SAM GP 1.10
PMC Req for Level 3	Supplier Agreement Management (cont.)	GG 3	GP 3.1 Establish and maintain the description of a defined supplier agreement management process.	OPD Ac 1	W		SAM GP 3.1
PMC Req for Level 3 cont	Supplier Agreement Management (cont.)	GG 3 (Cont)	GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the supplier agreement management process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		SAM GP 3.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Measurement and Analysis	SG 1	Measurement objectives and activities are aligned with identified information needs and objectives.			Not directly addressed	
			SP 1.1 Establish and maintain measurement objectives that are derived from identified information needs and objectives.	QPM Co 2	W	SW CMM less rigorous	MA SP 1.1
				QPM Ac 1	S		MA SP 1.1
				SPT&O Ac 5	W	implied	MA SP 1.1
				SPT&O Ac 6	W	implied	MA SP 1.1
				SPT&O Ac 7	W	implied	MA SP 1.1
				SPT&O Ac 8	W	implied	MA SP 1.1
				SPT&O Ac 9	W	implied	MA SP 1.1
				SPT&O Ac 11	W	implied	MA SP 1.1
			SP 1.2 Specify measures to address the measurement objectives.	QPM Ac 4	S		MA SP 1.2
			SP 1.3 Specify how measurement data will be obtained and stored.	QPM Ac 3	S		MA SP 1.3
				QPM Ac 4	W	Subpractices 6,9	MA SP 1.3
				QPM Ac 5	W	Subpractice 2	MA SP 1.3
			SP 1.4 Specify how measurement data will be analyzed and reported.	QPM Ac 3	W		MA SP 1.4
				QPM Ac 5	W	Subpractice 2	MA SP 1.4
				QPM Ac 6	W		MA SP 1.4
				SPT&O Ac 11	W		MA SP 1.4
		SG 2	Measurement results that address identified information needs and objectives are provided.	TCM Ab 4	W		MA SG 2
			SP 2.1 Obtain specified measurement data.	QPM Ac 4	S	Subpractices 2,9	MA SP 2.1
			SP 2.2 Analyze and interpret measurement data.	QPM Ac 5	S	Subpractice 2	MA SP 2.2
			SP 2.3 Manage and store measurement data, measurement specifications, and analysis results.	OPD Ac 5	S		MA SP 2.3
				QPM Ac 4	W	Subpractice 9	MA SP 2.3
				SPT&O Ac 11	S		MA SP 2.3
			SP 2.4 Report results of measurement and analysis activities to all relevant stakeholders.	QPM Ac 6	S		MA SP 2.4
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the measurement and analysis process.	QPM Co 1	W	Not directly addressed	MA GP 2.1
			GP 2.2 Establish and maintain the plan for performing the measurement and analysis process.	QPM Ac 1	W	Not directly addressed	MA GP 2.2
				SQM Ac 1	W		MA GP 2.2
				SQM Ac 2	W		MA GP 2.2
			GP 2.3 Provide adequate resources for performing the measurement and analysis process, developing the work products, and providing the services of the process.	QPM Ab2	W	Not directly addressed	MA GP 2.3
				QPM Ab 3	W		MA GP 2.3

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Measurement and Analysis cont	GG 2 cont	GP 2.3 Cont.	SQM Ab 1	W		MA GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the measurement and analysis process		N	Not directly addressed	
			GP 2.5 Train the people performing or supporting the measurement and analysis process as needed.	QPM Ab 4	W	Not directly addressed	MA GP 2.5
				SQM Ab 2	W		MA GP 2.5
				SQM Ab 3	W		MA GP 2.5
			GP 2.6 Place designated work products of the measurement and analysis process under appropriate levels of configuration management.	QPM Ac 1	S	Subpractice 4	MA GP 2.6
				QPM Ac 5	S	Subpractice 9	MA GP 2.6
				SCM Goal 2	W		MA GP 2.6
				SQM Ac 1	S	Subpractice 10	MA GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the measurement and analysis process as planned.	QPM Ac 2	S	Subpractice 5	MA GP 2.7
				QPM Ac 6	S		MA GP 2.7
			GP 2.8 Monitor and control the measurement and analysis process against the plan for performing the process and take appropriate corrective action.		N	Not directly addressed	MA GP 2.8
			GP 2.9 Objectively evaluate adherence of the measurement and analysis process against its process description, standards, and procedures, and address noncompliance.		N	Not directly addressed	MA GP 2.9
			GP 2.10 Review the activities, status, and results of the measurement and analysis process with higher level management and resolve issues.		N	Not directly addressed	MA GP 2.10
MA Req for Level 3		GG 3	GP 3.1 Establish and maintain the description of a defined measurement and analysis process.	OPD Ac 1	W		MA GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the measurement and anlysis process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		MA GP 3.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Process and Product Quality Assurance	SG 1	Adherence of the performed process and associated work products and services to applicable process descriptions, standards, and procedures is objectively evaluated.	SQA Goal 2	S	CMM v1.1 was often interpreted to call for independent SQA who reported directly to the senior management. In CMMI v1.1 the introductory material for PPQA points out that organizations can have other safeguards besides independence to ensure objectivity.	PPQA SG 1
			SP 1.1 Objectively evaluate the designated performed processes against the applicable process descriptions, standards, and procedures.	SPE Me 2	S		PPQA SP 1.1
				SPE,Ve 3	S		PPQA SP 1.1
				SQA Ac 4	S		PPQA SP 1.1
			SP 1.2 Objectively evaluate the designated work products and services against the applicable process descriptions, standards, and procedures.	SPE Me 1	S		PPQA SP 1.2
				SPE Ve 3	S		PPQA SP 1.2
				SQA Ac 5	S		PPQA SP 1.2
		SG 2	Noncompliance issues are objectively tracked and communicated, and resolution is ensured.	SQA Goal 4	S		PPQA SG 2
			SP 2.1 Communicate quality issues and ensure resolution of noncompliance issues with the staff and managers.	SQA Ac 6	S		PPQA SP 2.1
				SQA Ac 7	S		PPQA SP 2.1
			SP 2.2 Establish and maintain records of the quality assurance activities.	SQA Ac 4	W	Not directly addressed	PPQA SP 2.2
				SQA Ac 5	W		PPQA SP 2.2
				SQA Ac 7	W		PPQA SP 2.2
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the process and product quality assurance process.	SQA Co 1	W		PPQA GP 2.1
			GP 2.2 Establish and maintain the plan for performing the process and product quality assurance process.	SQA Ac 1	S	SW-CMM v1.1 doesn't always specify "maintain"	PPQA GP 2.2
				SQM Ac 1	S		PPQA GP 2.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Process and Product Quality Assurance (cont.)	GG 2 cont	GP 2.2 Cont.	SQM Ac 2	S		PPQA GP 2.2
			GP 2.3 Provide adequate resources for performing the process and product quality assurance process, developing the work products, and providing the services of the process.	SQA Ab 2	S		PPQA GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the process and product quality assurance process	SQA Ab 1	S		PPQA GP 2.4
			GP 2.5 Train the people performing or supporting the process and product quality assurance process as needed.	SQA Ab 3	S		PPQA GP 2.5
				SQA Ab 4	S		PPQA GP 2.5
			GP 2.6 Place designated work products of the process and product quality assurance process under appropriate levels of configuration management.	SCM Goal 2	W		PPQA GP 2.6
				SQA Ac 1	S	Subpractice 3	
			GP 2.7 Identify and involve the relevant stakeholders of the process and product quality assurance process as planned.	SCM Ac 9	W	"Relevant stakeholder" = "affected groups"	PPQA GP 2.7
				SQA Ac 1	S		PPQA GP 2.7
			GP 2.8 Monitor and control the process and product quality assurance process against the plan for performing the process and take appropriate corrective action.	SQA Me 1	S		PPQA GP 2.8
			GP 2.9 Objectively evaluate adherence of the process and product quality assurance process against its process description, standards, and procedures, and address noncompliance.	SQA Ve 3	S		PPQA GP 2.9
			GP 2.10 Review the activities, status, and results of the process and product quality assurance process with higher level management and resolve issues.	SQA Ve 1	S		PPQA GP 2.10
PPQA Req for Level 3		GG 3	GP 3.1 Establish and maintain the description of a defined process and product quality process.	OPD Ac 1	W		PPQA GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the process and product quality process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		PPQA GP 3.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Configuration Management	SG 1	Baselines of identified work products are established.	SCM Goal 2	S		CM SG 1
			SP 1.1 Identify the configuration items, components, and related work products that will be placed under configuration management.	SCM Ac 4	S		CM SP 1.1
			SP 1.2 Establish and maintain a configuration management and change management system for controlling work products.	SCM Ac 3	S		CM SP 1.2
				SCM Ac 5	S		CM SP 1.2
			SP 1.3 Create or release baselines for internal use and for delivery to the customer.	SCM Ac 7	S		CM SP 1.3
		SG 2	Changes to the work products under configuration management are tracked and controlled.	SCM Goal 2	W		CM SG 2
				SCM Goal 3	S		CM SG 2
			SP 2.1 Track change requests for the configuration items.	SCM Ac 5	S		CM SP 2.1
			SP 2.2 Control changes to the configuration items.	SCM Ac 5	W		CM SP 2.1
				SCM Ac 6	S		CM SP 2.1
		SG 3	Integrity of baselines is established and maintained.	SCM Goal 3	S		CM SG 3
			SP 3.1 Establish and maintain records describing configuration items.	SCM Ac 4	S		CM SP 3.1
				SCM Ac 8	S		CM SP 3.1
			SP 3.2 Perform configuration audits to maintain integrity of the configuration baselines.	SCM Ac 10	S		CM SP 3.2
				SCM Ve 3	S		CM SP 3.2
		GG 2	The process is institutionalized as a managed process.			Implied by Level 2	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the configuration management process.	SCM Co 1	S	SW-CMM v1.1 doesn't specify "maintain"	CM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the configuration management process.	SCM Ac 1	S	SW-CMM v1.1 doesn't specify "maintain"	CM GP 2.2
				SCM Ac 2	S		CM GP 2.2
			GP 2.3 Provide adequate resources for performing the configuration management process, developing the work products, and providing the services of the process.	SCM Ab 3	S		CM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the configuration management process	SCM Ab 1	S		CM GP 2.4
				SCM Ab 2	S		CM GP 2.4
			GP 2.5 Train the people performing or supporting the configuration management process as needed.	SCM Ab 4	S		CM GP 2.5
				SCM Ab 5	S		CM GP 2.5
			GP 2.6 Place designated work products of the configuration management process under appropriate levels of configuration management.	SCM Goal 2	W		CM GP 2.6
				SCM Ac 1	S		
			GP 2.7 Identify and involve the relevant stakeholders of the configuration management process as planned.	SCM Ac 1	S		CM GP 2.7
				SCM Ac 2	S		CM GP 2.7
				SCM Ac 9	S		CM GP 2.7

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 2 (cont.)	Configuration Management (cont.)	GG 2 (cont.)	GP 2.8 Monitor and control the configuration management process against the plan for performing the process and take appropriate corrective action.	SCM Me 1	S		CM GP 2.8
			GP 2.9 Objectively evaluate adherence of the configuration management process against its process description, standards, and procedures, and address noncompliance.	SCM Ve 4	S		CM GP 2.9
			GP 2.10 Review the activities, status, and results of the configuration management process with higher level management and resolve issues.	SCM Ve 1	S		CM GP 2.10
CM Req for Level 3		GG 3	GP 3.1 Establish and maintain the description of a defined configuration management process.	OPD Ac 1	W		CM GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the configuration management process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		CM GP 3.2
Maturity Level 3							
	Requirements Development	SG 1	Stakeholder needs, expectations, constraints, and interfaces are collected and translated into customer requirements.	IC Ac 1	S	SW CMM less rigorous	RD SG 1
				SPE Ac 2	W	weak "collection" wording	RD SG 1
			SP 1.1 Elicit stakeholder needs, expectations, constraints, and interfaces for all phases of the product' s life cycle.	IC Ac 1	S		RD SP 1.1
				SPE Ac 2	W		RD SP 1.1
			SP 1.2 Transform stakeholder needs, expectations, constraints, and interfaces into customer requirements.	IC Ac 1	S		RD SP 1.2
				SPE Ac 2	W		RD SP 1.2
		SG 2	Customer requirements are refined and elaborated to develop product and product-component requirements.	SPE Ac 2	S		RD SG 2
			SP 2.1 Establish and maintain product and product-component requirements which are based on the customer requirements.	SPE Ac 2	S		RD SP 2.1
			SP 2.2 Allocate the requirements for each product component.	RM Ab 2	W		RD SP 2.2
				SPE Ac 3	S		RD SP 2.2
			SP 2.3 Identify interface requirements.	SPE Ac 2	S	Subpractice 1	RD SP 2.3
				SPE Ac 3	S	Subpractice 8	RD SP 2.3
		SG 3	The requirements are analyzed and validated, and a definition of required functionality is developed.	SPE Ac 2	S		RD SG 3
			SP 3.1 Establish and maintain operational concepts and associated scenarios.	SPE Ac 2	W	SW CMM less rigorous	RD SP 3.1
			SP 3.2 Establish and maintain a definition of required functionality.	SPE Ac 2	S		RD SP 3.2
			SP 3.3 Analyze requirements to ensure that they are necessary and sufficient.	SPE Ac 2	S		RD SP 3.3
			SP 3.4 Analyze requirements to balance stakeholder needs and constraints.	SPE Ac 2	S		RD SP 3.4

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Requirements Development (cont.)	SG 3 (cont.)	SP 3.5 Validate requirements to ensure the resulting product will perform as intended in the user's environment using multiple techniques as appropriate.	SPE Ac 2	S		RD SP 3.5
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the requirements development process.		N	Not directly addressed	
			GP 2.2 Establish and maintain the plan for performing the requirements development process.		N	Not directly addressed	
			GP 2.3 Provide adequate resources for performing the requirements development process, developing the work products, and providing the services of the process.	IC Ab 1	W	Not directly addressed	RD GP 2.3
				RM Ab 3	W		RD GP 2.3
				SPE Ab 1	S		RD GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the requirements development process		N	Not directly addressed	
			GP 2.5 Train the people performing or supporting the requirements development process as needed.	SPE Ab 2	S		RD GP 2.5
			GP 2.6 Place designated work products of the requirements development process under appropriate levels of configuration management.	RM Ac 2	S	Subpractice 1	RD GP 2.6
				SCM Goal 2	S		RD GP 2.6
				SPE Ac 2	S	Subpractice 11	RD GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the requirements development process as planned.		N	SW-CMM v1.1 doesn't specify a plan for performing the RD process	
			GP 2.8 Monitor and control the requirements development process against the plan for performing the process and take appropriate corrective action.		N	SW-CMM v1.1 doesn't specify a plan for performing the RD process	
			GP 2.9 Objectively evaluate adherence of the requirements development process against its process description, standards, and procedures, and address noncompliance.	SPE Ve 3	S		RD GP 2.9
			GP 2.10 Review the activities, status, and results of the requirements development process with higher level management and resolve issues.	SPE Ve 1	S		RD GP 2.10
			GP 3.1 Establish and maintain the description of a defined requirements development process.	OPD Ac 3	W	Not directly addressed	RD GP 3.1
				OPD Ac 4	W		RD GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the requirements development process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	S		RD GP 3.2
				SPT&O Ac 11	S		RD GP 3.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Technical Solution	SG 1	Product or product component solutions are selected from alternative solutions.		N	Not addressed	
			SP 1.1 Develop detailed alternative solutions and selection criteria.		N	Not addressed	
			SP 1.2 Evolve the operational concept, scenarios, and environments to describe the conditions, operating modes, and operating states specific to each product component.		N	Not addressed	
			SP 1.3 Select the product component solutions that best satisfy the criteria established.		N	Not addressed	
		SG 2	Product or product-component designs are developed	SPE Ac 3	S		TS SG 2
			SP 2.1 Develop a design for the product or product component.	SPE Ac 3	S		TS SP 2.1
			SP 2.2 Establish and maintain a technical data package.	SPE Ac 3	S		TS SP 2.2
			SP 2.3 Design comprehensive product-component interfaces in terms of established and maintained criteria.	SPE Ac 3	W	Subpractice 8 SW CMM less rigorous	TS SP 2.3
			SP 2.4 Evaluate whether the product components should be developed, purchased, or reused based on established criteria.	ISM Ac 6	W	Subpractice 3	TS SP 2.4
		SG 3	Product components, and associated support documentation, are implemented from their designs.	SPE Ac 4	S		TS SG 3
				SPE Ac 8	S		TS SG 3
			SP 3.1 Implement the designs of the product components.	SPE Ac 4	S		TS SP 3.1
			SP 3.2 Develop and maintain the end-use documentation.	SPE Ac 8	S		TS SP 3.2
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the technical solution process.	SPE Co 1	S		TS GP 2.1
			GP 2.2 Establish and maintain the plan for performing the technical solution process.	SPP Ac 6	W		TS GP 2.2
				SPP Ac 7	W		TS GP 2.2
			GP 2.3 Provide adequate resources for performing the technical solution process, developing the work products, and providing the services of the process.	SPE Ab 1	S		TS GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the technical solution process		N	Not directly addressed	
			GP 2.5 Train the people performing or supporting the technical solution process as needed.	SPE Ab 2	S		TS GP 2.5
				SPE Ab 3	S		TS GP 2.5
			GP 2.6 Place designated work products of the technical solution process under appropriate levels of configuration management.	SCM Goal 2	S		TS GP 2.6
				SPE AC 1	S	Subpractices 3,4	TS GP 2.6
				SPE AC 2	S	Subpractice 11	TS GP 2.6
				SPE AC 3	S	Subpractice 10	TS GP 2.6
				SPE AC 4	S	subpractice 5	TS GP 2.6
				SPE AC 5	W	Subpractice 7	TS GP 2.6
				SPE AC 7	W	Subpractice 8	TS GP 2.6
				SPE AC 8	S	Subpractice 6	TS GP 2.6
				SPE AC 10	S	Subpractice 3	TS GP 2.6

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Technical Solution (cont.)	GG 3 cont	GP 2.7 Identify and involve the relevant stakeholders of the technical solution process as planned.	IC Ac 3	S		TS GP 2.7
				ISM Ac 4	W	Subpractice 9	TS GP 2.7
				SPE Ac 3	W		TS GP 2.7
			GP 2.8 Monitor and control the technical solution process against the plan for performing the process and take appropriate corrective action.	SPE Me 2	W	Not directly addressed	TS GP 2.8
				STP&O Goal 1	S		TS. GP 2.8
				SPT&O Ac 3	S		
				SPT&O Ac 5	M		
				SPT&O Ac 6	M		
				SPT&O Ac7	M		
				SPT&O Ac 8	S		
				SPT&O Ac 9	S		
				SPT&O Ac 10	S		
				SPT&O Ac 12	S		
				SPT&O Ac 13	S		
			GP 2.9 Objectively evaluate adherence of the technical solution process against its process description, standards, and procedures, and address noncompliance.	SPE Ve 3	W	Not directly addressed	TS GP 2.9
			GP 2.10 Review the activities, status, and results of the technical solution process with higher level management and resolve issues.	SPE Ve 1	W	Not directly addressed	TS GP 2.10
			GP 3.1 Establish and maintain the description of a defined technical solution process.	OPD Ac 3	W	Not directly addressed	TS GP 3.1
				OPD Ac 4	W		TS GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the technical solution process to support the future use and improvement of the organization's processes and process assets.	OPD Ac 5	S		TS GP 3.2
				SPT&O Ac 11	S		TS GP 3.2
	Product Integration	SG 1	Preparation for product integration is conducted.	SPE Ac 4	W		PI SG 1
				SPE Ac 6	S		PI SG 1
			SP 1.1 Determine the product-component integration sequence.	SPE Ac 4	S		PI SP 1.1
				SPE Ac 6	S		PI SP 1.1
			SP 1.2 Establish and maintain the environment needed to support the integration of the product components.	SPP Ac 14	S		PI SP 1.2
			SP 1.3 Establish and maintain procedures and criteria for integration of the product components.		N	Not addressed	
		SG 2	The product-component interfaces, both internal and external, are compatible.	SPE Ac 3	W	See subpractice 8	PI SG 2
			SP 2.1 Review interface descriptions for coverage and completeness.	SPE Ac 3	W		PI SP 2.1
			SP 2.2 Manage internal and external interface definitions, designs, and changes for products and product components.	SCM Ac 5	W		PI SP 2.2
				SPE Ac 3	S		PI SP 2.2

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Product Integration cont.	SG 2 cont		SPE Ac 10	S		PI SP 2.2
		SG 3	Verified product components are assembled and the integrated, verified, and validated product is delivered.	SPE Ac 5	S	Implied	PI SG 3
				SPE Ac 6	S		PI SG 3
				SPE Ac 7	S		PI SG 3
			SP 3.1 Confirm, prior to assembly, that each product component required to assemble the product has been properly identifed, functions according to its description, and that the product-component interfaces comply with the interface descriptions.	IC Ac 5	W	SW CMM less rigorous	PI SP 3.1
				SPE Ac 5	S		PI SP 3.1
			SP 3.2 Assemble product components according to the product integration sequence and available procedures.	SPE Ac 6	W	SW CMM less rigorous	PI SP 3.2
			SP 3.3 Evaluate assembled product components for interface compatibility.	SPE Ac 6	S		PI SP 3.3
				SPE Ac 7	S		PI SP 3.3
			SP 3.4 Package the assembled product or product component and deliver it to the appropriate customer.		N	Not addressed	
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the product integration process.		N	Not directly addressed	
			GP 2.2 Establish and maintain the plan for performing the product integration process.		N	Not directly addressed	
			GP 2.3 Provide adequate resources for performing the product integration process, developing the work products, and providing the services of the process.	SPE Ab 1	W		PI GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the product integration process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the product integration process as needed.	SPE Ab 2	S		PI GP 2.5
				SPE Ab 3	S		PI GP 2.5
				SPE Ab 4	S		PI GP 2.5
			GP 2.6 Place designated work products of the product integration process under appropriate levels of configuration management.	SCM Goal 2	W		PI GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the product integration process as planned.		N	CMM doesn't specify a plan for Product Integration	
			GP 2.8 Monitor and control the product integration process against the plan for performing the process and take appropriate corrective action.		N	CMM doesn't specify a plan for Product Integration	

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Product Integration (cont.)	GG 3 cont	GP 2.9 Objectively evaluate adherence of the product integration process against its process description, standards, and procedures, and address noncompliance.	SPE Ve 3	S		PI GP 2.9
			GP 2.10 Review the activities, status, and results of the product integration process with higher level management and resolve issues.	SPE Ve 1	S		PI GP 2.10
			GP 3.1 Establish and maintain the description of a defined product integration process.	OPD Ac 3	W	Not directly addressed	PI GP 3.1
				OPD Ac 4	W		PI GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the product integration process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	S		PI GP 3.2
				SPT&O Ac 11	S		PI GP 3.2
	Verification	SG 1	Preparation for verification is conducted.	PR Ac 1	S	SW CMM More rigorous	VER SG 1
				PR Ac 2	S		VER SG 1
			SP 1.1 Select the work products to be verified and the verification methods that will be used for each.	PR Ac 1	S		VER SP 1.1
				SPE Ac 5	S		VER SP 1.1
				SPE Ac 6	S		VER SP 1.1
				SPE Ac 7	S		VER SP 1.1
			SP 1.2 Establish and maintain the environment needed to support verification.	SPP Ac 14	S	Subpractice 3	VER SP 1.2
				SPE Ac 7	W		VER SP 1.2
			SP 1.3 Establish and maintain verification procedures and criteria for the selected work products.	SPE Ac 5	S		VER SP 1.3
				SPE Ac 6	S		VER SP 1.3
		SG 2	Peer reviews are performed on selected work products.	PR Ac 2	S		VER SG 2
			SP 2.1 Prepare for peer reviews of selected work products.	PR Ac 1	S		VER SP 2.1
			SP 2.2 Conduct peer reviews on selected work products and identify issues resulting from the peer review.	PR Ac 2	S		VER SP 2.2
				PR Ac 3	S		VER SP 2.2
			SP 2.3 Analyze data about preparation, conduct, and results of the peer reviews.	PR Ac 3	S		VER SP 2.3
				QPM Ac 5	S		VER SP 2.3
				APE Ac 9	S		VER SP 2.3
		SG 3	Selected work products are verified against their specified requirements.			Not directly addressed but practices covered by SPE & SQA	
			SP 3.1 Perform verification on the selected work products.	SPE Ac 5	S		VER SP 3.1
				SPE Ac 6	S		VER SP 3.1
				SPE Ac 7	S		VER SP 3.1
				SQA Ac 5	S		VER SP 3.1

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Verification (cont.)	SG 3 cont	SP 3.2 Analyze the results of all verification activities and identify corrective action.	SPE Ac 7	S		VER SP 3.2
				SPE Ac 9	S		VER SP 3.2
				SQA Ac 5	S		VER SP 3.2
				SQA Ac 7	S		VER SP 3.2
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the verification process.	PR Co 1	W	Verification not directly addressed	VER GP 2.1
				SPE Co 1	W		VER GP 2.1
			GP 2.2 Establish and maintain the plan for performing the verification process.	PR Ac 1	W	Verification not directly addressed	VER GP 2.2
				SPP Ac 6	W		VER GP 2.2
				SPP Ac 7	W		VER GP 2.2
				SQA Ac 1	W		VER GP 2.2
			GP 2.3 Provide adequate resources for performing the verification process, developing the work products, and providing the services of the process.	PR Ab 1	W	Verification not directly addressed	VER GP 2.3
				SPE Ab 1	W		VER GP 2.3
				SQA Ab 1	W		VER GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the verification process		N	Verification not directly addressed	
			GP 2.5 Train the people performing or supporting the verification process as needed.	PR Ab 2	S		VER GP 2.5
				PR Ab 3	S		VER GP 2.5
				SPE Ab 2	S		VER GP 2.5
				SPE Ab 3	S		VER GP 2.5
				SPE Ab 4	S		VER GP 2.5
			GP 2.6 Place designated work products of the verification process under appropriate levels of configuration management.	SCM Goal 2	S		VER GP 2.6
				SPE Ac 5	S	Subpractice 7	VER GP 2.6
				SPE Ac 7	S	Subpractice 6	VER GP 2.6
				SQA Ac 7	S	Subpractice 4	VER GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the verification process as planned.	SPE Ac 5	W		VER GP 2.7
				SPE Ac 7	S	Subpractice 4	VER GP 2.7
			GP 2.8 Monitor and control the verification process against the plan for performing the process and take appropriate corrective action.	PR Me 1	S	Verification not directly addressed	VER GP 2.8
				SPE Me 2	S		VER GP 2.8

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Verification (cont.)	GG 3 cont		SPT&O Ac 12	S		VER GP 2.8
				SPT&O Ac 13	S		VER GP 2.8
			GP 2.9 Objectively evaluate adherence of the verification process against its process description, standards, and procedures, and address noncompliance.	PR Ve 2	W	Verification not directly addressed	VER GP 2.9
				SPE Ve 3	W		VER GP 2.9
			GP 2.10 Review the activities, status, and results of the verification process with higher level management and resolve issues.	SPE Ve 1	S	Verification not directly addressed	VER GP 2.10
			GP 3.1 Establish and maintain the description of a defined verification process.	OPD Ac 1	W	Verification not directly addressed	VER GP 3.1
				OPD Ac 2	W		VER GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the verification process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	S	Verification not directly addressed	VER GP 3.2
				OPF Ac 4	S	By inclusion	VER GP 3.2
				PR Me 1	S		VER GP 3.2
				SPE Me 2	S		VER GP 3.2
				SPT&O Ac 11	S		VER GP 3.2
	Validation	SG 1	Preparation for validation is conducted.		N	Not directly addressed	
			SP 1.1 Select products and product components to be validated and the validation methods that will be used for each.	SPE Ac 2	S		VAL SP 1.1
				SPE Ac 5	S		VAL SP 1.1
				SPE Ac 7	S		VAL SP 1.1
			SP 1.2 Establish and maintain the environment needed to support validation.	SPE Ab1	S		VAL SP 1.2
				SPE Ac 1	W		VAL SP 1.2
				SPP Ac 14	S		VAL SP 1.2
			SP 1.3 Establish and maintain procedures and criteria for validation.	SPE Ac 7	S		
		SG 2	The product or product components are validated to ensure that they are suitable for use in their intended operating environment.		N	Not directly addressed	
			SP 2.1 Perform validation on the selected products and product components.	SPE Ac 7	S		VAL SP 2.1
			SP 2.2 Analyze the results of the validation activities and identify issues.	SPE Ac 7	S		VA. SP 2.2
				SPE Ac 9	S		VA. SP 2.2
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Validation (cont.)	GG 3 cont	GP 2.1 Establish and maintain an organizational policy for planning and performing the validation process.		N	Validation not directly addressed	
			GP 2.2 Establish and maintain the plan for performing the validation process.		N	Validation plan not directly addressed	
				SPE Ac 7	W		VAL GP 2.2
			GP 2.3 Provide adequate resources for performing the validation process, developing the work products, and providing the services of the process.	PR Ab 1	S		VAL GP 2.3
				SPE Ab 1	S		VAL GP 2.3
				SQA Ab 1	S		VAL GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the validation process	SPE Ac 7	S		VAL GP 2.4
			GP 2.5 Train the people performing or supporting the validation process as needed.	PR Ab 2	S		VAL GP 2.5
				PR Ab 3	S		VAL GP 2.5
				SPE Ab 2	S		VAL GP 2.5
				SPE Ab 3	S		VAL GP 2.5
				SPE Ab 4	S		VAL GP 2.5
			GP 2.6 Place designated work products of the validation process under appropriate levels of configuration management.	SCM Goal 2	S		VAL GP 2.6
				SPE Ac 7	S	Subpractice 8	VAL GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the validation process as planned.	SPE Ac 2	S		VAL GP 2.7
			GP 2.8 Monitor and control the validation process against the plan for performing the process and take appropriate corrective action.	PR Me 1	W		VAL GP 2.8
				SPE Me 2	S	by inclusion	VAL GP 2.8
			GP 2.9 Objectively evaluate adherence of the validation process against its process description, standards, and procedures, and address noncompliance.	PR Ve 1	W		VAL GP 2.9
				SPE Ve 3	S		VAL GP 2.9
			GP 2.10 Review the activities, status, and results of the validation process with higher level management and resolve issues.	SPE Ve 1	S		VAL GP 2.10
			GP 3.1 Establish and maintain the description of a defined validation process.	OPD Ac 3	W	Not directly addressed	VAL GP 3.1
				OPD Ac 4	W		VAL GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the validation process to support the future use and improvement of the organization' s	OPD Ac 5	S	by inclusion	VAL GP 3.2
				OPF Ac 4	S	by inclusion	VAL GP 3.2
				PR Me 1	W		VAL GP 3.2

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Validation (cont.)	GG 3 cont	processes and process assets.	SPE Ac 9	S		
				SPT&O Ac 11	S	by inclusion	VAL GP 3.2
	Organizational Process Focus	SG1	Strengths, weaknesses, and improvement opportunities for the organization's processes are identified periodically and as needed.	OPF Goal 2	S	SW CMM more rigorous	OPF SG 1
			SP 1.1 Establish and maintain the description of the process needs and objectives for the organization.	QPM Ac 1	W	SW CMM addresses project, not organization	OPF SP 1.1
			SP 1.2 Appraise the processes of the organization periodically and as needed to maintain an understanding of their strengths and weaknesses.	OPF Ac 1	S	SW-CMM more rigorous	OPF SP 1.2
			SP 1.3 Identify improvements to the organization's processes and process assets.	OPF Ac 1	S		OPF SP 1.3
				OPF Ac 5	S		OPF SP 1.3
				TCM Ac 2	S		OPF SP 1.3
				TCM Ac 4	S		OPF SP 1.3
		SG2	Improvements are planned and implemented, organizationial process assets are deployed, and process-related experiences are incorporated into the organizational process assets.	OPF Goal 3	W		OPF SG 2
				OPF Ac 2	W		OFP SG 2
			SP 2.1 Establish and maintain process action plans to address improvements to the organization's processes and related process assets.	OPF Ac 1	S		OPF SP 2.1
				OPF Ac 2	S		OPF SP 2.1
				OPF Ac 3	W		OPF SP 2.1
				PCM Ac 4	S		OPF SP 2.1
			SP 2.2 Implement process action plans across the organization.	OPF Ac 3	W	SW-CMM less rigorous	OPF SP 2.2
				PCM Ac 4	S		OPF SP 2.2
			SP 2.3 Deploy organizational process assets across the organization.	OPF Ac 5	S		OPF SP 2.3
			SP 2.4 Incorporate process-related work products, measures, and improvement information derived from planning and performing the process into the organization's process assets.	ISM Ac 5	W		OPF SP 2.4
				OPD Ac 5	W		OPF SP 2.4
				OPD Ac 6	W		OPF SP 2.4
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational process focus process.	OPF Co 1	S		OPF GP 2.1
			GP 2.2 Establish and maintain the plan for performing the organizational process focus process.	OPF Ac 2	S		OFP GP 2.2

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Process Focus cont	GG 3 cont	GP 2.3 Provide adequate resources for performing the organizational process focus process, developing the work products, and providing the services of the process.	OPF Ab 2	S		OPF GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational process focus process	OPF Ab 1	S		OPF GP 2.4
			GP 2.5 Train the people performing or supporting the organizational process focus process as needed.	OPF Ab 3	S		OPF GP 2.5
				OPF Ab 4	S		OPF GP 2.5
			GP 2.6 Place designated work products of the organizational process focus process under appropriate levels of configuration management.	SCM Goal 2	S		OPF GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the organizational process focus process as planned.	OPF Ac 2	S	Subpractice 3	OPF GP 2.7
				OPF Ac 7	S		OPF GP 2.7
			GP 2.8 Monitor and control the organizational process focus process against the plan for performing the process and take appropriate corrective action.	OPF Me 1	S		OPF GP 2.8
			GP 2.9 Objectively evaluate adherence of the organizational process focus process against its process description, standards, and procedures, and address noncompliance.		N	Not directly addressed	
			GP 2.10 Review the activities, status, and results of the organizational process focus process with higher level management and resolve issues.	OPF Ve 1	S		OPF GP 2.10
			GP 3.1 Establish and maintain the description of a defined organizational process focus process.	OPF Ac 2	W		SW CMM addresses plan, not process
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational process focus process to support the future use and improvement of the organization' s processes and process assets.	OPF Me 1	S		OPF GP 3.2
	Organizational Process Definition	SG1	A set of organizational process assets is established and maintained.	OPD Ac 5	S		OPD SG 1
				OPD Ac 6	S		OPD SG 1
			SP 1.1 Establish and maintain the organization's set of standard processes.	OPD Ac 1	S		OPD SP 1.1
				OPD Ac 2	S		OPD SP 1.1
			SP 1.2 Establish and maintain descriptions of the life-cycle models approved for use in the organization.	OPD Ac 3	S		OPD SP 1.2
			SP 1.3 Establish and maintain the tailoring criteria and guidelines for the organization's set of standard processes.	OPD Ac 4	S		OPD SP 1.3
			SP 1.4 Establish and maintain the organization's measurement repository	OPD Ac 5	S		OPD SP 1.4
			SP 1.5 Establish and maintain the organization's process asset library.	OPD Ac 5	S		OPD SP 1.5
				OPD Ac 6	S		OPD SP 1.5
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Process Definition cont	GG 3 cont	GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational process definition process.	OPD Co 1	S		OPD GP 2.1
			GP 2.2 Establish and maintain the plan for performing the organizational process definition process.	OPD Ac 1	W	SW-CMM v1.1 addresses procedure not plan	OPD GP 2.2
			GP 2.3 Provide adequate resources for performing the organizational process definition process, developing the work products, and providing the services of the process.	OPD Ab 1	S		OPD GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational process definition process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the organizational process definition process as needed.	OPD Ab 2	S		OPD GP 2.5
			GP 2.6 Place designated work products of the organizational process definition process under appropriate levels of configuration management.	OPD Ac 1	S	Subpractice 9	OPD GP 2.6
				OPD Ac 2	W		OPD GP 2.6
				OPD Ac 3	S	Subpractice 4	OPD GP 2.6
				OPD Ac 4	S	Subpractice 3	OPD GP 2.6
				OPD Ac 5	S	Subpractice 3	OPD GP 2.6
				OPD Ac 6	S	Subpractice 6	OPD GP 2.6
				SCM Goal 2	S		OPD GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the organizational process definition process as planned.		N	Not addressed	
			GP 2.8 Monitor and control the organizational process definition process against the plan for performing the process and take appropriate corrective action.	OPD Me 1	W	No plan to measure against OPD process	OPD GP 2.8
			GP 2.9 Objectively evaluate adherence of the organizational process definition process against its process description, standards, and procedures, and address noncompliance.	OPD Ve 1	S		OPD GP 2.9
			GP 2.10 Review the activities, status, and results of the organizational process definition process with higher level management and resolve issues.		N	Not addressed	
			GP 3.1 Establish and maintain the description of a defined organizational process definition process.	OPD Ac 1	S		OPD GP 3.1
				OPD Ac 2	S		OPD GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational process definition process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		OPD GP 3.2
				OPD Me 1	S		OPD GP 3.2
	Organizational Training	SG1	A training capability that supports the organization's management and technical roles is established and maintained.	TP Goal 2	S	SW CMM more rigorous	OT SG 1

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Training cont	SG1 cont	SP 1.1 Establish and maintain the strategic training needs of the organization.	TP Ac 2	S	SW CMM less rigorous	OT SP 1.1
			SP 1.2 Determine which training needs are the responsibility of the organization and which will be left to the individual project or support group.	TP Ac 2	W	SW CMM less rigorous	OT SP 1.2
			SP 1.3 Establish and maintain an organizational training tactical plan.	TP Ac 2	S		OT SP 1.3
			SP 1.4 Establish and maintain training capability to address organizational training needs.	TP Ab 2	W		OT SP 1.4
				TP Ab 3	S		OT SP 1.4
				TP Ac 1	W		OT SP 1.4
		SG2	Training necessary for individuals to perform their roles effectively is provided.	TP Goal 3 Also appropriate KPA abilities regarding training	S		OT SG 2
			SP 2.1 Deliver the training following the organizational training tactical plan.	TP Ac 3	S		OT SP 2.1
			SP 2.2 Establish and maintain records of the organizational training.	TP Ac 6	S		OT SP 2.2
			SP 2.3 Assess the effectiveness of the organization' s training program.	TP Me 2	S		OT SP 2.3
				TP Ve 2	S		OT SP 2.3
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational training process.	TP Co 1	S		OT GP 2.1
			GP 2.2 Establish and maintain the plan for performing the organizational training process.	TP Ac 2	S		OT GP 2.2
			GP 2.3 Provide adequate resources for performing the organizational training process, developing the work products, and providing the services of the process.	TP Ab 2	S		OT GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational training process	TP Ab 1	S		OT GP 2.4
			GP 2.5 Train the people performing or supporting the organizational training process as needed.	TP Ab 3	S		OT GP 2.5
				TP Ab 4	S		OT GP 2.5
			GP 2.6 Place designated work products of the organizational training process under appropriate levels of configuration management.	SCM Goal 2	S		OT GP 2.6
				TP Ac 2	S	Subpractice 5	OT GP 2.6
				TP Ac 3	S	Subpractice 3	OT GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the organizational training process as planned.	TP Ac 2	S		OT GP 2.7
			GP 2.8 Monitor and control the organizational training process against the plan for performing the process and take appropriate corrective action.	TP Me 1	S		OT GP 2L8
				TP Me 2	S		OT GP 2.8

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Training cont cont	GG 3 cont	GP 2.9 Objectively evaluate adherence of the organizational training process against its process description, standards, and procedures, and address noncompliance.	TP Ve 2	S		OT GP 2.9
				TP Ve 3	S		OT GP 2.9
			GP 2.10 Review the activities, status, and results of the organizational training process with higher level management and resolve issues.	TP Ve 1	S		OT GP 2.10
			GP 3.1 Establish and maintain the description of a defined organizational training process.	TP Ac 2	S		OT GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational training process to support the future use and improvement of the organization' s processes and process assets.	TP Me 1	S		OT GP 3.2
				TP Me 2	S		OT GP 3.2
	Integrated Project Management	SG 1	The project is conducted using a defined process that is tailored from the organization's set of standard processes.	ISM Goal 1	S		IPM SG 1
				ISM Goal 2	S		IPM SG 1
			SP 1.1 Establish and maintain the project's defined process.	ISM Ac 1	S		IPM SP 1.1
				ISM Ac 2	S		IPM SP 1.1
			SP 1.2 Use the organizational process assets and measurement repository for estimating and planning the project' s activities.	ISM Ac 5	S		IPM SP 1.2
			SP 1.3 Integrate the project plan and the other plans that affect the project to describe the project' s defined process.	SPP Ac 6	S	Not directly addressed	IPM SP 1.3
				SPP Ac 7	S		IPM SP 1.3
			SP 1.4 Manage the project using the project plan, the other plans that affect the project, and the project' s defined process.	ISM Ac 4	S	SW CMM less rigorous	IPM SP 1.4
				ISM Ac 9	S		IPM SP 1.4
				ISM Ac 11	S		IPM SP 1.4
			SP 1.5 Contribute work products, measures, and documented experiences to the organizational process assets.	ISM Ac 5	S		IPM SP 1.5
				OPD Ac 5	S		IPM SP 1.5
				OPD Ac 6	S		IPM SP 1.5
		SG 2	Coordination and collaboration of the project with relevant stakeholders is conducted.	IC Ac 2	S		IPM SG 2
				IC Ac 4	S		IPM SG 2
				IC Ac 7	S		IPM SG 2
				IC Goal 3	S		IPM SG 2
				ISM Ac 11	S		IPM SG 2
			SP 2.1 Manage the involvement of the relevant stakeholders in the project.	IC Ac 1	S		IPM SP 2.1
				IC Ac 2	S		IPM SP 2.1
				IC Ac 3	S		IPM SP 2.1
				IC Ac 7	S		IPM SP 2.1
			SP 2.2 Participate with relevant stakeholders to identify, negotiate, and track	IC Ac 2	S		IPM SP 2.2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Integrated Project Management cont	SG 2 cont	critical dependencies.	IC Ac 3	W		IPM SP 2.2
				IC Ac 4	S		IPM SP 2.2
				IC Ac 7	S		IPM SP 2.2
			SP 2.3 Resolve issues with relevant stakeholders.	IC Ac 2	S		IPM SP 2.3
				IC Ac 6	S		IPM SP 2.3
				SQM Ac 4	W	Subpractice 5	IPM SP 2.3
		SG 3	The project is conducted using the project's shared vision.		N	Not addressed	
			SP 3.1 Identify expectations, constraints, interfaces, and operational conditions applicable to the project's shared vision		N	Not addressed	
			SP 3.2 Establish and maintain a shared vision for the project.		N	Not addressed	
		SG 4	The integrated teams needed to execute the project are identified, defined, structured, and tasked.		N	Not addressed	
			SP 4.1 Determine the integrated team structure that will best meet the project objectives and constraints.		N	Not addressed	
			SP 4.2 Develop a preliminary distribution of requirements, responsibilities, authorities, tasks, and interfaces to teams in the selected integrated team structure.		N	Not addressed	
			SP 4.3 Establish and maintain teams in the integrated team structure.		N	Not addressed	
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the integrated project management process.	ISM Co 1	S		IPM GP 2.1
				IC Co 1	S		
			GP 2.2 Establish and maintain the plan for performing the integrated project management process.	IC Ac 3	S	SW-CMM v1.1 doesn't specify "maintain" SW-CMM not as rigorous	IPM GP 2.2
				ISM Ac 2	W		IPM GP 2.2
				ISM Ac 3	S		IPM GP 2.2
			GP 2.3 Provide adequate resources for performing the integrated project management process, developing the work products, and providing the services of the process.	ISM Ab 1	S		IPM GP 2.3
				IC Ab 1	S		IPM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the integrated project management process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the integrated project management process as needed.	ISM Ab 2	S		IPM GP 2.5
				ISM Ab 3	S		IPM GP 2.5
			GP 2.6 Place designated work products of the integrated project management process under appropriate levels of configuration management.	SCM Goal 2	W		IPM GP 2.6
				ISM Ac 1	S	Subpractice 5	IPM GP 2.6
				ISM Ac 2	S		IPM GP 2.6
				ISM Ac 3	S		IPM GP 2.6

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Integrated Project Management (cont.)	GG 3 cont		ISM Ac 10	S	Subpractice 5	IPM GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the integrated project management process as planned.	ISM Ac 4	S	Subpractice 9	IPM GP 2.7
				ISM Ac 9	S		IPM GP 2.7
				ISM Ac 10	S		IPM GP 2.7
				ISM Ac 11	S		IPM GP 2.7
			GP 2.8 Monitor and control the integrated project management process against the plan for performing the process and take appropriate corrective action.	ISM Me 1	S		IPM GP 2.8
			GP 2.9 Objectively evaluate adherence of the integrated project management process against its process description, standards, and procedures, and address noncompliance.	ISM Ve 3	S		IPM GP 2.9
			GP 2.10 Review the activities, status, and results of the integrated project management process with higher level management and resolve issues.	ISM Ve 1	S		IPM GP 2.10
			GP 3.1 Establish and maintain the description of a defined integrated project management process.	ISM Co 1	W	Not directly addressed	IPM GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the integrated project management process to support the future use and improvement of the organization' s processes and process assets.	ISM Co 1	S	Subpractice 4	IPM GP 3.2
				ISM Ac 4	S	Subpractice 5	
				ISM Ac 5	S	Subpractice 3	
				OPD Ac 5	S		
				OPF Ac 4	S		IPM GP 3.2
				SPT&O Ac 11	S		IPM GP 3.2
	Risk Management	SG 1	Preparation for risk management is conducted.			Not directly addressed	
			SP 1.1 Determine risk sources and categories.	ISM Ac 10	S	Detail often in subpractices	RM SP 1.1
				RM Ac 3	W	Subpractice 2	RM SP 1.1
				SPP Ac 7	W	Subpractice 9	RM SP 1.1
				SPP Ac 13	S		RM SP 1.1
			SP 1.2 Define the parameters used to analyze and categorize risks, and the parameters used to control the risk management effort.		N	Not addressed	
			SP 1.3 Establish and maintain the strategy to be used for risk management.	ISM Ac 10	S		RM SP 1.3
		SG 2	Risks are identified and analyzed to determine their relative importance.	ISM Ac 10	S	Detail often in subpractices	FM SG 2
				SPP Ac 13	S		RM SG 2
			SP 2.1 Identify and document the risks.	ISM Ac 6	W	Subpractice 2	RM SP 2.1
				ISM Ac 10	S		RM SP 2.1

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Risk Management cont	SG 2 cont		SPP Ac 7	S	Subpractice 9	RM SP 2.1
				SPP Ac 13	S		RM SP 2.1
			SP 2.2 Evaluate and classify each identified risk using the defined risk categories and parameters, and determine its relative priority.	ISM Ac 10	S		RM SP 2.2
				SPP Ac 13	S		RM SP 2.2
		SG 3	Risks are handled and mitigated, where appropriate, to reduce adverse impacts on achieving objectives.	ISM Ac 10	S	Detail often in subpractices	RM SG 3
				SPP Ac 13	S		RM SG 3
			SP 3.1 Develop a risk mitigation plan for the most important risks to the project, as defined by the risk management strategy.	ISM Ac 10	S	Detail often in subpractices	RM SP 3.1
			SP 3.2 Monitor the status of each risk periodically and implement the risk mitigation plan as appropriate.	ISM Ac 10	S	Detail often in subpractices	RM SP 3.2
				SPT&O Ac 10	S		RM SP 3.2
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the risk management process.	ISM Co 1	W	Not directly addressed	RM GP 2.1
				SPP Co 2	W		RM GP 2.1
				SPT&O Co 2	W		RM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the risk management process.	ISM Ac 2	W	SW-CMM v1.1 doesn't specify "maintain"	RM GP 2.2
				ISM Ac 1	W		RM GP 2.2
				ISM Ac 3	W		RM GP 2.2
				SPT&O Ab 1	W		RM GP 2.2
				SPT&O Ac 1	W		RM GP 2.2
				SPT&O Ac 2	W		RM GP 2.2
			GP 2.3 Provide adequate resources for performing the risk management process, developing the work products, and providing the services of the process.	ISM Ab 1	S	included as subset	RM GP 2.3
				SPT&O Ab 3	S	included as subset	RM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the risk management process	SPT&O Ab 2	S	included as subset	RM GP 2.4
			GP 2.5 Train the people performing or supporting the risk management process as needed.	ISM Ab 2	S	included as subset	RM GP 2.5
				ISM Ab 3	S	included as subset	RM GP 2.5
				SPT&O Ab 4	S	included as subset	RM GP 2.5
				SPT&O Ab 5	S	included as subset	RM GP 2.5

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Risk Management cont	GG 3 cont	GP 2.6 Place designated work products of the risk management process under appropriate levels of configuration management.	ISM Ac 10	S	Subpractice 5	RM GP 2.6
				SCM Goal 2	W		RM GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the risk management process as planned.	ISM Ac 10	S		RM GP 2.7
			GP 2.8 Monitor and control the risk management process against the plan for performing the process and take appropriate corrective action.	ISM Me 1	S		RM GP 2.8
			GP 2.9 Objectively evaluate adherence of the risk management process against its process description, standards, and procedures, and address noncompliance.	ISM Ve 3	S		RM GP 2.9
				SPT&O Ve 3	S		RM GP 2.9
			GP 2.10 Review the activities, status, and results of the risk management process with higher level management and resolve issues.	ISM Ve 1	S		RM GP 2.10
				SPT&O Ve 1	S		RM GP 2.10
			GP 3.1 Establish and maintain the description of a defined risk management process.	OPD Ac 3	W	Not directly addressed	RM GP 3.1
				OPD Ac 4	W		RM GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the risk management process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	S	included as subset	RM GP 3.2
				OPF Ac 4	S		RM GP 3.2
				SPT&O Ac 11	W		RM GP 3.2
	Integrated Teaming	SG 1	A team composition that provides the knowledge and skills required to deliver the team's product is established and maintained.		N	Not addressed	
			SP 1.1 Identify and define the team's specific internal tasks to generate the team's expected output.		N	Not addressed	
			SP 1.2 Identify the knowledge, skills, and functional expertise needed to perform team tasks.		N	Not addressed	
			SP 1.3 Assign the appropriate personnel to be team members based on required knowledge and skills.		N	Not addressed	
		SG 2	Operation of the integrated team is governed according to established principles.		N	Not addressed	
			SP 2.1 Establish and maintain a shared vision for the integrated team that is aligned with any overarching or higher-level vision.		N	Not addressed	
			SP 2.2 Establish and maintain a team charter based on the integrated team's shared vision and overall team objectives.		N	Not addressed	
			SP 2.3 Clearly define and maintain each team member's roles and responsibilities.		N	Not addressed	
			SP 2.4 Establish and maintain collaboration among interfacing teams.	IC Ac 2	W		IT SP 2.4
				IC Ac 4	W		IT SP 2.4
				IC Ac 7	W		IT SP 2.4
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Integrated Teaming cont		GP 2.1 Establish and maintain an organizational policy for planning and performing the integrated teaming process.		N	Not directly addressed	
			GP 2.2 Establish and maintain the plan for performing the integrated teaming process.		N	Not addressed	
			GP 2.3 Provide adequate resources for performing the integrated teaming process, developing the work products, and providing the services of the process.		N	Not addressed	
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the integrated teaming process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the integrated teaming process as needed.		N	Not addressed	
			GP 2.6 Place designated work products of the integrated teaming process under appropriate levels of configuration management.		N	Not addressed	
			GP 2.7 Identify and involve the relevant stakeholders of the integrated teaming process as planned.		N	Not addressed	
			GP 2.8 Monitor and control the integrated teaming process against the plan for performing the process and take appropriate corrective action.		N	Not directly addressed	
			GP 2.9 Objectively evaluate adherence of the integrated teaming process against its process description, standards, and procedures, and address noncompliance.		N	Not directly addressed	
			GP 2.10 Review the activities, status, and results of the integrated teaming process with higher level management and resolve issues.		N	Not directly addressed	
			GP 3.1 Establish and maintain the description of a defined integrated teaming process.		N	Not directly addressed	
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the integrated teaming process to support the future use and improvement of the organization's processes and process assets.		N	Not directly addressed	
	Integrated Supplier Management	SG 1	Potential sources of products that best fit the needs of the project are identified, analyzed, and selected		N	Not directly addressed	ISM SG 1
			SP 1.1 Identify and analyze potential sources of products that may be used to satisfy the project's requirements.		N	Not directly addressed	ISM SP 1.1
			SP 1.2 Use a formal evaluation process to determine which sources of custom-made and off-the-shelf products to use.		N	Not directly addressed	ISM SP 1.2
		SG 2	Work is coordinated with suppliers to ensure the supplier agreement is executed appropriately.	SSM Goal 3	S		ISM SG 2
				SSM Goal 4	S		ISM SG 2
			SP 2.1 Monitor and analyze selected processes used by the supplier.	SSM Ac 8	S		ISM SP 2.1
				SSM AC 9	S		ISM SP 2.1
				SSM Ac 13	W		ISM SP 2.1
			SP 2.2 For custom-made products, evaluate selected supplier work products.	SSM Ac 6	S	Subpractice 4,5,6	ISM SP 2.2
				SSM Ac 8	S		ISM SP 2.2
				SSM Ac 9	S		ISM SP 2.2

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Integrated Supplier Management (cont.)	SG (cont.)		SSM Ac 13	W		ISM SP 2.2
			SP 2.3 Revise the supplier agreement or relationship, as appropriate, to reflect changes in conditions.	SSM Ac 6	S		ISM SP 2.3
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the integrated supplier management process.	SSM Co 1	S		ISM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the integrated supplier management process.		N	Not addressed	
			GP 2.3 Provide adequate resources for performing the integrated supplier management process, developing the work products, and providing the services of the process.	SSM Ab 1	S		ISM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the integrated supplier management process	SSM Co 2	S		ISM GP 2.4
			GP 2.5 Train the people performing or supporting the integrated supplier management as needed.	SSM AB 2	S		ISM GP 2.5
			GP 2.6 Place designated work products of the integrated supplier management process under appropriate levels of configuration management.	SCM Goal 2	W		ISM GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the integrated supplier management process as planned.		N	Not addressed	
			GP 2.8 Monitor and control the integrated supplier management process against the plan for performing the process and take appropriate corrective action.		N	Not addressed	
			GP 2.9 Objectively evaluate adherence of the integrated supplier management process against its process description, standards, and procedures, and address noncompliance.	SSM Ve 3	S		ISM GP 2.9
			GP 2.10 Review the activities, status, and results of the integrated supplier management process with higher level management and resolve issues.	SSM Ve 1	S		ISM GP 2.10
			GP 3.1 Establish and maintain the description of a defined integrated supplier management process.		N	Not addressed	
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the integrated	OPD Ac 5	W		ISM GP 3.2
			supplier management process to support the future use and improvement of the organization' s processes and process assets.	OPF Ac 4	W		ISM GP 3.2

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Decision Analysis and Resolution	SG 1	Decisions are based on an evaluation of alternatives using established criteria.		N	Not addressed	
			SP 1.1 Establish and maintain guidelines to determine which issues are subject to a formal evaluation process.		N	Not addressed	
			SP 1.2 Establish and maintain the criteria for evaluating alternatives, and the relative ranking of these criteria.		N	Not addressed	
			SP 1.3 Identify alternative solutions to address issues.		N	Not addressed	
			SP 1.4 Select the evaluation methods.		N	Not addressed	
			SP 1.5 Evaluate alternative solutions using the established criteria and methods.		N	Not addressed	
			SP 1.6 Select solutions from the alternatives based on the evaluation criteria.		N	Not addressed	
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the decision analysis and resolution process.		N	Not addressed	
		GG 3 cont	GP 2.2 Establish and maintain the plan for performing the decision analysis and resolution process.		N	Not addressed	
			GP 2.3 Provide adequate resources for performing the decision analysis and resolution process, developing the work products, and providing the services of the process.		N	Not addressed	
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the decision analysis and resolution process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the decision analysis and resolution process as needed.		N	Not addressed	
			GP 2.6 Place designated work products of the decision analysis and resolution process under appropriate levels of configuration management.		N	Not addressed	
			GP 2.7 Identify and involve the relevant stakeholders of the decision analysis and resolution process as planned.		N	Not addressed	
			GP 2.8 Monitor and control the decision analysis and resolution process against the plan for performing the process and take appropriate corrective action.		N	Not addressed	
			GP 2.9 Objectively evaluate adherence of the decision analysis and resolution process against its process description, standards, and procedures, and address noncompliance.		N	Not addressed	
			GP 2.10 Review the activities, status, and results of the decision analysis and resolution process with higher level management and resolve issues.		N	Not addressed	
			GP 3.1 Establish and maintain the description of a defined decision analysis and resolution process.		N	Not addressed	
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the decision analysis and resolution process to support the future use and improvement of the organization' s processes and process assets.		N	Not addressed	

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Environment for Integration	SG1	An infrastructure that maximizes the productivity of people and affects the collaboration necessary for integration is provided.		N	Not addressed	
			SP 1.1 Establish and maintain a shared vision for the organization.		N	Not addressed	
			SP 1.2 Establish and maintain an integrated work environment that supports IPPD by enabling collaboration and concurrent development.		N	Not addressed	
			SP 1.3 Identify the unique skills needed to support the IPPD environment.		N	Not addressed	
		SG 2	People are managed to nurture the integrative and collaborative behaviors of an IPPD environment		N	Not addressed	
			SP 2.1 Establish and maintain leadership mechanisms to enable timely collaboration		N	Not addressed	
			SP 2.2 Establish and maintain incentives for adopting and demonstrating integrative and collaborative behaviors at all levels of the organization.		N	Not addressed	
			SP 2.3 Establish and maintain organizational guidelines to balance team and home organization responsibilities.		N	Not addressed	
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational environment for integration process.		N	Not addressed	
			GP 2.2 Establish and maintain the plan for performing the organizational environment for integration process.		N	Not addressed	
			GP 2.3 Provide adequate resources for performing the organizational environment for integration process, developing the work products, and providing the services of the process.		N	Not addressed	
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational environment for integration process		N	Not addressed	
			GP 2.5 Train the people performing or supporting the organizational environment for integration process as needed.		N	Not addressed	
			GP 2.6 Place designated work products of the organizational environment for integration process under appropriate levels of configuration management.		N	Not addressed	
			GP 2.7 Identify and involve the relevant stakeholders of the organizational environment for integration process as planned.		N	Not addressed	
			GP 2.8 Monitor and control the organizational environment for integration process against the plan for performing the process and take appropriate corrective action.		N	Not addressed	
			GP 2.9 Objectively evaluate adherence of the organizational environment for integration process against its process description, standards, and procedures, and address noncompliance.		N	Not addressed	
			GP 2.10 Review the activities, status, and results of the organizational environment for integration process with higher level management and resolve issues.		N	Not addressed	

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 3 (cont.)	Organizational Environment for Integration		GP 3.1 Establish and maintain the description of a defined organizational environment for integration process.		N	Not addressed	
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational environment for integration process to support the future use and improvement of the organization' s processes and process assets.		N	Not addressed	
Maturity Level 4							
	Organizational Process Performance	SG 1	Baselines and models that characterize the expected process performance of the organization's set of standard processes are established and maintained.	QPM Goal 3	S		OPP SG 1
			SP 1.1 Select the processes or process elements in the organization's set of standard processes that are to be included in the organization's process performance analyses.		N		
			SP 1.2 Establish and maintain definitions of the measures that are to be included in the organization's process performance analyses.		N		
			SP 1.3 Establish and maintain quantitative objectives for quality and process performance for the organization.		N		
			SP 1.4 Establish and maintain the organization's process performance baselines.	QPM Ac 7	S		OPP SP 1.4
			SP 1.5 Establish and maintain the process performance models for the organization's set of standard processes.	QPM Ac 7	W	Process models are not explicitly mentioned in SW CMM. QPM Ac 7 is probably the practice that would cover the concept.	OPP SP 1.5
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational process performance process.		N	SW-CMM addresses projects rather than the organization.	OPP GP 2.1
			GP 2.2 Establish and maintain the plan for performing the organizational process performance process.		N		
			GP 2.3 Provide adequate resources for performing the organizational process performance process, developing the work products, and providing the services of the process.		N		
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational process performance process		N		

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Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 4 (cont.)	Organizational Process Performance (cont.)		GP 2.5 Train the people performing or supporting the organizational process performance process as needed.	QPM Ab 4	S		OPP GP 2.5
				QPM Ab 5	S		OPP GP 2.5
				SQM Ab 2	S		OPP GP 2.5
				SQM Ab 3	S		OPP GP 2.5
			GP 2.6 Place designated work products of the organizational process performance process under appropriate levels of configuration management.	SCM Goal 2	W		OPP GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the organizational process performance process as planned.		N		
			GP 2.8 Monitor and control the organizational process performance process against the plan for performing the process and take appropriate corrective action.		N		
			GP 2.9 Objectively evaluate adherence of the organizational process performance process against its process description, standards, and	QPM Ve 3	S		OPP GP 2.9
				SQM Ve 3	S		OPP GP 2.9
			GP 2.10 Review the activities, status, and results of the organizational process performance process with higher level management and resolve issues.	QPM Ve 1	S		OPP GP 2.10
				SQM Ve 1	S		OPP GP 2.10
			GP 3.1 Establish and maintain the description of a defined organizational process performance process.	OPD Ac 1	W		OPP GP 3.1
				OPD Ac 2	W		OPP GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational process performance process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		OPP GP 3.2
				OPF Ac 4	W		OPP GP 3.2
	Quantitative Project Management	SG 1	The project is quantitatively managed using quality and process performance objectives.	SQM Goal 3	W	SW CMM less rigorous	QPM SG 1
			SP 1.1 Establish and maintain the project's quality and process performance objectives.	QPM Ac 1	S		QPM SP 1.1
				QPM Ac 2	S		QPM SP 1.1
				SQM Ac 1	S		QPM SP 1.1
				SQM Ac 3	S		QPM SP 1.1
			SP 1.2 Select the processes and process elements that comprise the project' s defined process based on historical stability and capability data.		N	Not addressed	
			SP 1.3 Select the subprocesses of the project's defined process that will be statistically managed	QPM Ac 2	S	Subpractice 2	QPM SP 1.3
			SP 1.4 Monitor the project to determine whether the project' s objectives for quality and process performance will be satisfied, and identify corrective action as appropriate.	QPM Ac 5	S		QPM SP 1.4
				SQM Ac 4	S		QPM SP 1.4
		SG 2	The performance of selected subprocesses within the project's defined process is statistically managed.	QPM Goal 2	S	SW CMM less rigorous	QPM SG 2

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 4 (cont.)	Quantitative Project Management (cont.)	SG 2 cont	SP 2.1 Select the measures and analytic techniques to be used in statistically managing the selected subprocesses.	QPM Ac 4	S	Subpractices 2,7	QPM SP 2.1
			SP 2.2 Establish and maintain an understanding of the variation of the selected subprocesses using the selected measures and analytic techniques.	QPM Ac 5	S	SW-CMM is less explicit about what is meant by quantitative control. A variety of quantitative charts and diagrams are sugggested as possible tools. The CMMI in SP 2.2 (or Goal 2) doesn't mention control charts in the goal or practice statements, but there is little doubt left by the subpractices that this is what they had in mind.	QPM SP 2.2
			SP 2.3 Monitor the performance of the selected subprocesses to determine their capability to satisfy their quality and process performance objectives, and identify corrective action as necessary.	QPM Ac 5	S		QPM SP 2.3
			SP 2.4 Record statistical and quality management data in the organization' s measurement repository.	QPM Ac 4	S	Subparactice 9	QPM SP 2.4
				QPM Ac 7	S		QPM SP 2.4
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the quantitative project management process.	QPM Co 1	S		QPM GP 2.1
			GP 2.2 Establish and maintain the plan for performing the quantitative project management process.	QPM Ac 1	S	SW-CMM v1.1 not as rigorous	QPM GP 2.2
			GP 2.3 Provide adequate resources for performing the quantitative project management process, developing the work products, and providing the services of the process.	QPM Ab 2	S		QPM GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the quantitative project management process	QPM Ab 1	S		QPM GP 2.4
			GP 2.5 Train the people performing or supporting the quantitative project	QPM Ab 4	S		QPM GP 2.5

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 4 (cont.)	Quantitative Project Management (cont.)	GG 3 cont	management process as needed.	QPM Ab 5	S		QPM GP 2.5
			GP 2.6 Place designated work products of the quantitative project management process under appropriate levels of configuration management.	QPM Ac 1	S	Subpractice 4	QPM GP 2.6
				QPM Ac 5	S	Subpractice 9	QPM GP 2.6
				QPM Ac7	S	Subpractice 5	QPM GP 2.6
				SCM Goal 2	S		QPM GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the quantitative project management process as planned.	QPM Ac 1	W		QPM GP 2.7
				QPM Ac 2	S	Subpractice 5	QPM GP 2.7
			GP 2.8 Monitor and control the quantitative project management process against the plan for performing the process and take appropriate corrective action.	QPM Me 1	S		QPM GP 2.8
			GP 2.9 Objectively evaluate adherence of the quantitative project management process against its process description, standards, and procedures, and address noncompliance.	QPM Ve 3	S		QPM GP 2.9
			GP 2.10 Review the activities, status, and results of the quantitative project management process with higher level management and resolve issues.	QPM Ve 1	S		QPM GP 2.10
			GP 3.1 Establish and maintain the description of a defined quantitative project management process.	QPM Ac 1	S		QPM GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the quantitative project management process to support the future use and improvement of the organization' s processes and process assets.	OPD Ac 5	W		QPM GP 3.2
				OPF Ac 4	W		QPM GP 3.2
				QPM Ac 4	S		
				QPM Me 1	S		QPM GP 3.2
				SPT&O Ac 11	W		QPM GP 3.2
Maturity Level 5							
	Organizational Innovation and Deployment	SG 1	Process and technology improvements that contribute to meeting quality and process-performance objectives are selected.	TCM Goal 2	M		OID SG 1
			SP 1.1 Collect and analyze process- and technology-improvement proposals.	PCM Ac 5	S	SW CMM less rigorous	OID SP 1.1
				TCM Ac 2	S		OID SP 1.1
				TCM Ac 4	W		OID SP 1.1
			SP 1.2 Identify and analyze innovative improvements that could increase the organization' s quality and process performance.	TCM Ac 2	S	SW CMM less rigorous	OID SP 1.2
				TCM Ac 4	S		OID SP 1.2
			SP 1.3 Pilot process and technology improvements to select which ones to implement.	PCM Ac 7	S		OID SP 1.3
				TCM Ac 6	S		OID SP 1.3

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 5 (cont.)	Organizational Innovation and Deployment (cont.)	SG 1 cont	SP 1.4 Select process- and technology-improvement proposals for deployment across the organization.	OPF Ac 5	S		OID SP 1.4
				PCM Ac 5	W		OID SP 1.4
				TCM Ac 5	S		OID SP 1.4
		SG 2	Measurable improvements to the organization's processes and technologies are continually and systematically deployed.	PCM Goal 3	S		OID SG 2
			SP 2.1 Establish and maintain the plans for deploying the selected process and technology improvements.	PCM Ac 3	W		OID SP 2.1
				PCM Ac 5	S	Subpractice 5	OID SP 2.1
				PCM Ac 8	S	Implied by Level 3	OID SP 2.1
				TCM Ac 7	S		OID SP 2.1
			SP 2.2 Manage the deployment of the selected process and technology improvements.	DP Ac 4	W		OID SP 2.2
				PCM Ac 5	W		OID SP 2.2
				PCM Ac 8	S		OID SP 2.2
				TCM Ac 7	S		OID SP 2.2
				TCM Ac 8	S		OID SP 2.2
			SP 2.3 Measure the effects of the deployed process and technology improvements.	PCM Ac 9	S		OID SP 2.3
				PCM Me 1	S		OID SP 2.3
				TCM Me 1	S		OID SP 2.3
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the organizational innovation and deployment process.	PCM Co 1	S		OID GP 2.1
				TCM Co 1	S		OID GP 2.1
			GP 2.2 Establish and maintain the plan for performing the organizational innovation and deployment process.	PCM Ac 3	S		OID GP 2.2
				TCM Ac 1	S		OID GP 2.2
			GP 2.3 Provide adequate resources for performing the organizational innovation and deployment process, developing the work products, and providing the services of the process.	PCM Ab 1	S		OID GP 2.3
				TCM Ab 2	S		OID GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the organizational innovation and deployment process	PCM Ac 2	W		OID GP 2.4
				TCM Ab 1	S		OID GP 2.4
			GP 2.5 Train the people performing or supporting the organizational innovation and deployment process as needed.	PCM Ab 2	S		OID GP 2.5
				PCM Ab 3	S		OID GP 2.5
				PCM Ab 4	S		OID GP 2.5
				TCM Ab 5	S		OID GP 2.5
			GP 2.6 Place designated work products of the organizational innovation and deployment process under appropriate levels of configuration management.	PCM Ac 3	S	Subpractice 4	OID GP 2.6
				SCM Goal 2	W		OID GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the organizational innovation and deployment process as planned.	PCM Ac 3	W		OID GP 2.7
				PCM Ac 4	S		OID GP 2.7

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 5 (cont.)	Organizational Innovation and Deployment (cont.)			PCM Ac 6	S		OID GP 2.7
				PCM Ac 10	S		OID GP 2.7
				TCM Ac 3	S		OID GP 2.7
				TCM Ac 5	W		OID GP 2.7
				TCM Ac 6	S		OID GP 2.7
			GP 2.8 Monitor and control the organizational innovation and deployment process against the plan for performing the process and take appropriate corrective action.	PCM Me 1	S		OID GP 2.8
				TCM Me 1	S		OID GP 2.8
			GP 2.9 Objectively evaluate adherence of the organizational innovation and deployment process against its process description, standards, and procedures, and address noncompliance.	PCM Ve 2	S		OID GP 2.9
				TCM Ve 2	S		OID GP 2.9
			GP 2.10 Review the activities, status, and results of the organizational innovation and deployment process with higher-level management and resolve issues.	PCM Ve 1	S		OID GP 2.10
				TCM Ve 1	S		OID GP 2.10
			GP 3.1 Establish and maintain the description of a defined organizational innovation and deployment process.	PCM Ac 3	S		OID GP 3.1
				TCM Ac 1	S		OID GP 3.1
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the organizational innovation and deployment process to support the future use and improvement of the organization' s processes and process assets.	PCM Me 1	S		OID GP 3.2
				TCM Me 1	S		OID GP 3.2
	Causal Analysis and Resolution	SG 1	Root causes of defects and other problems are systematically determined.	DP Goal 2	S		CAR SG 1
				SPE Ac 9	W		CAR SG 1
			SP 1.1 Select the defects and other problems for analysis.	SPE Ac 9	W		CAR SP 1.1
				DP Ac 3	S		CAR SP 1.1
			SP 1.2 Perform causal analysis of selected defects and other problems and propose actions to address them.	DP Ac 3	S		CAR SP 1.2
		SG 2	Root causes of defects and other problems are systematically addressed to prevent their future occurrence.	DP Goal 3	S		CAR SG 2
		SG 2	SP 2.1 Implement the selected action proposals that were developed in causal analysis.	DP Ac 7	S		CAR SP 2.1
			SP 2.2 Evaluate the effect of changes on process performance.	DP Ac 4	W	Subpractice 8	CAR SP 2.2
				PCM Ac 7	S		CAR SP 2.2
				QPM Ac 7	S	Subpractice 7	CAR SP 2.2
			SP 2.3 Record causal analysis and resolution data for use across the project and organization.	DP Ac 5	S		CAR SP 2.3
		GG 3	The process is institutionalized as a defined process.			Implied by Level 3	
			GP 2.1 Establish and maintain an organizational policy for planning and performing the causal analysis and resolution process.	DP Co 1	S		CAR GP 2.1

Mapping of CMMI-SE/SW/IPPD/SS Staged V.1.1 to SW-CMM V. 1.1

Process Maturity Level	CMMI Process Area	CMMI Goal	CMMI Specific Practice or Generic Practice	SW-CMMv1.1 Goal/ Common Feature	Strength	Comments	CMMI-SE/SW/IPPD/SS crossreference
Maturity Level 5 (cont.)	Causal Analysis and Resolution (cont.)	GG 3 (cont.)		DP Co 2	S		CAR GP 2.1
			GP 2.2 Establish and maintain the plan for performing the causal analysis and resolution process.	DP Ac 1	S	SW-CMM v1.1 not as rigorous	CAR GP 2.2
			GP 2.3 Provide adequate resources for performing the causal analysis and resolution process, developing the work products, and providing the services of the process.	DP Ab 3	S		CAR GP 2.3
			GP 2.4 Assign responsibility and authority for performing the process, developing the work products, and providing the services of the causal analysis and resolution process	DP Ab 1	S		CAR GP 2.4
				DP Ab 2	S		CAR GP 2.4
			GP 2.5 Train the people performing or supporting the causal analysis and resolution process as needed.	DP Ab 4	S		CAR GP 2.5
			GP 2.6 Place designated work products of the causal analysis and resolution process under appropriate levels of configuration management.	SCM Goal 2	W		CAR GP 2.6
			GP 2.7 Identify and involve the relevant stakeholders of the causal analysis and resolution process as planned.	DP Ab 1	W		CAR GP 2.7
				DP Ab 2	S		CAR GP 2.7
				DP Ab 3	S		CAR GP 2.7
				DP Ac 2	S		CAR GP 2.7
				DP Ac 3	S		CAR GP 2.7
				DP Ac 4	S		CAR GP 2.7
			GP 2.8 Monitor and control the causal analysis and resolution process against the plan for performing the process and take appropriate corrective action.	DP Me 1	S		CAR GP 2.8
			GP 2.9 Objectively evaluate adherence of the causal analysis and resolution process against its process description, standards, and procedures, and address noncompliance.	DP Ve 3	S		CAR GP 2.9
			GP 2.10 Review the activities, status, and results of the causal analysis and resolution process with higher level management and resolve issues.	DP Ve 1	S		CAR GP 2.10
			GP 3.1 Establish and maintain the description of a defined causal analysis and resolution process.		N	Not directly addressed	
			GP 3.2 Collect work products, measures, measurement results, and improvement information derived from planning and performing the causal analysis and resolution process to support the future use and improvement of the organization' s processes and process assets.	DP Me 1	S		CAR GP 3.2

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable					
	Requirements Management	Goals	Goal 1 - System requirements allocated to software are controlled to establish a baseline for software engineering and management use.	RM SG 1	
			Goal 2 - Software plans, products, and activities are kept consistent with the system requirements allocated to software.	RM SG 1	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for managing the system requirements allocated to software.	RM GP 2.1	
		Ability to Perform	Ability 1 - For each project, responsibility is established for analyzing the system requirements and allocating them to hardware, software, and other system components.	RM GP 2.4	
			Ability 2 - The allocated requirements are documented.	RD SP 2.2	
			Ability 3 - Adequate resources and funding are provided for managing the allocated requirements.	RM GP 2.3	
			Ability 4 - Members of the software engineering group and other software-related groups are trained to perform their requirements management activities.	OT SG 2 RM GP 2.5	
		Activities Performed	Activity 1 - The software engineering group reviews the allocated requirements before they are incorporated into the software project.	RD GP 2.7 RM SP 1.2	
			Activity 2 - The software engineering group uses the allocated requirements as the basis for software plans, work products, and activities.		Not directly addressed
			Activity 3 - Changes to the allocated requirements are reviewed and incorporated into the software project.	RM SP 1.2, 1.3, 1.5 RSKM SP 1.1	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the activities for managing the allocated requirements.	RM GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for managing the allocated requirements are reviewed with senior management on a periodic basis.	RM GP 2.10	
			Verification 2 - The activities for managing the allocated requirements are reviewed with the project manager on both a periodic and event-driven basis.	RM GP 2.8	Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the allocated requirements and reports the results.	RM GP 2.9	CMMI not as specific
	Software Project Planning	Goals	Goal 1 - Software estimates are documented for use in planning and tracking the software project.	PP SG 1	
			Goal 2 - Software project activities and commitments are planned and documented.	PP SG 2,3	
			Goal 3 - Affected groups and individuals agree to their commitments related to the software project.	PP SG 3	
		Commitment to Perform	Commitment 1 - A project software manager is designated to be responsible for negotiating commitments and developing the project's software development plan.	PP GP 2.4	
			Commitment 2 - The project follows a written organizational policy for planning a software project.	PP GP 2.1, 2.2	
		Ability to Perform	Ability 1 - A documented and approved statement of work exists for the software project.		Not directly addressed
			Ability 2 - Responsibilities for developing the software development plan are assigned.	PP GP 2.4 RD GP 2.4	
			Ability 3 - Adequate resources and funding are provided for planning the software project.	PP GP 2.3 RD GP 2.3	
			Ability 4 - The software managers, software engineers, and other individuals involved in the software project planning are trained in the software estimating and planning procedures applicable to their areas of responsibility.	PP GP 2.5 RD GP 2.5	
		Activities Performed	Activity 1 - The software engineering group participates on the project proposal team.	PP GP 2.7 PP SP 2.6, 3.2 RD GP 2.7	
			Activity 2 - Software project planning is initiated in the early stages of, and in parallel with, the overall project planning.		Not directly addressed
			Activity 3 - The software engineering group participates with other affected groups in the overall project planning throughout the project's life.	PP GP 2.7 PP SP 2.6, 3.1 RD GP 2.7	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Project Planning (cont.)		Activity 4 - Software project commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.	PP SP 3.1, 3.2	
			Activity 5 - A software life cycle with predefined stages of manageable size is identified or defined.	PP SP 1.1, 1.3	
			Activity 6 - The project's software development plan is developed according to a documented procedure.	RD GP 2.2 PP SG 2 PP GP 2.2, 2.7 PP SP 2.6,3.1, 3.2, 3.3 TS GP 2.2 VAL GP 2.2 VER GP 2.2	
			Activity 7 - The plan for the software project is documented.	PP GP 2.2 PP SG 2 PP SP 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.7 RSKM SP 1.1, 2.1 TS GP 2.2 VAL GP 2.2 VER GP 2.2	
			Activity 8 - Software work products that are needed to establish and maintain control of the software project are identified.	PP SP 2.3	
			Activity 9 - Estimates for the size of the software work products (or changes to the size of software work products) are derived according to a documented procedure.	PP GP 2.2 PP SP 1.2, 1.4	
			Activity 10 - Estimates for the software project's effort and costs are derived according to a documented procedure.	PP GP 2.2 PP SP 1.2, 1.4	
			Activity 11 - Estimates for the project's critical computer resources are derived according to a documented procedure.	PP GP 2.2 PP SP 2.4	
			Activity 12 - The project's software schedule is derived according to a documented procedure.	PP GP 2.2 PP SP 2.1, 3.2	
			Activity 13 - The software risks associated with the cost, resource, schedule, and technical aspects of the project are identified, assessed, and documented.	PP SP 2.2 RSKM SG 2 RSKM SP 1.1, 2.1, 2.2	
			Activity 14 - Plans for the project's software engineering facilities and support tools are prepared.	PP SP 1.4, 2.4, 3.2 VAL SP 1.2	
			Activity 15 - Software planning data are recorded.	M&A SP 2.3	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the software planning activities.	PP GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for software project planning are reviewed with senior management on a periodic basis.	PP GP 2.10 RM GP 2.10	
			Verification 2 - The activities for software project planning are reviewed with the project manager on both a periodic and event-driven basis.	PP GP 2.8	Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software project planning and reports the results.	PP GP 2.9	CMMI not as specific
	Software Project Tracking and Oversight	Goals	Goal 1 - Actual results and performances are tracked against the software plans.	PMC SG 1 TS GP 2.8 VER GP 2.8	
			Goal 2 - Corrective actions are taken and managed to closure when results and performance deviate significantly from the software plans.	PMC SG2	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Project Tracking and Oversight (cont.)		Goal 3 - Changes to software commitments are agreed to by the affected groups and individuals.		Not directly addressed
		Commitment to Perform	Commitment 1 - A project software manager is designated to be responsible for the project's software activities and results.	PMC GP 2.4	
			Commitment 2 - The project follows a written organizational policy for managing the software project.	PMC GP 2.1 RSKM GP 2.1	
		Ability to Perform	Ability 1 - A software development plan for the software project is documented and approved.	PP GP 2.2 PP SP 2.6, 2.7 PMC GP 2.2 RSKM GP 2.2	
			Ability 2 - The project software manager explicitly assigns responsibility for the software work products and activities.	PMC GP 2.4 RSKM GP 2.4	
			Ability 3 - Adequate resources and funding are provided for tracking the software project.	PMC GP 2.3 RSKM GP 2.3	
			Ability 4 - The software managers are trained in managing the technical and personnel aspects of the software project.	OT SG 2 PMC GP 2.5 RSKM GP 2.5	
			Ability 5 - First-line software managers receive orientation in the technical aspects of the software project.	PMC GP 2.5 RSKM GP 2.5	Not directly addressed
		Activities Performed	Activity 1 - A documented software development plan is used for tracking the software activities and communicating status.	PMC GP 2.2 PMC SP 1.1 RSKM GP 2.2	
			Activity 2 - The project's software development plan is revised according to a documented procedure.	PMC GP 2.2 PP GP 2.2 PP SP 2.7 RM SP1.3 RSKM GP 2.2	
			Activity 3 - Software project commitments and changes to commitments made to individuals and groups external to the organization are reviewed with senior management according to a documented procedure.		
			Activity 4 - Approved changes to commitments that affect the software project are communicated to the members of the software engineering group and other software-related groups.	PMC SP 1.6	
			Activity 5 - The size of the software work products (or size of changes to the software work products) are tracked, and corrective actions are taken as necessary.	M&A SP 1.1 PMC SP 1.1, 2.1, 2.2 PP SP 2.3	
			Activity 6 - The project's software effort and costs are tracked, and corrective actions are taken as necessary.	M&A SP 1.1 PMC SP 1.1, 1.6, 2.1, 2.2 PP SP 2.3	
			Activity 7 - The project's critical computer resources are tracked, and corrective actions are taken as necessary.	M&A SP 1.1 PP SP 2.3 PMC SP 1.1, 2.1, 2.2	
			Activity 8 - The project's software schedule is tracked, and corrective actions are taken as necessary.	M&A SP 1.1 PMC SP 1.1, 1.2, 1.6, 2.1, 2.2 PP SP 2.3	
			Activity 9 - Software engineering technical activities are tracked, and corrective actions are taken as necessary.	M&A SP 1.1 PMC SP 1.1, 1.6, 2.1, 2.2, 2.3 PP SP 2.3	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Project Tracking and Oversight (cont.)		Activity 10 - The software risks associated with cost, resource, schedule, and technical aspects of the project are tracked.	PMC SP 1.3 PP SP 2.3 RSKM SP 3.2	
			Activity 11 - Actual measurement data and replanning data for the software project are recorded.	M&A SP 1.1, 1.4, 2.3 PMC SP 1.4 PP SP 2.3 Also, most Level 3 and higher GP 3.2	
			Activity 12 - The software engineering group conducts periodic internal reviews to track technical progress, plans, performance, and issues against the software development plan.	PMC GP 2.7 PMC SP 1.2,1.5, 1.6, 1.7	
			Activity 13 - Formal reviews to address the accomplishments and results of the software project are conducted at selected project milestones according to a documented procedure.	PMC GP 2.7 PMC SP 1.5,1.7	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the software tracking and oversight activities.	PMC GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for software project tracking and oversight are reviewed with senior management on a periodic basis.	PMC GP 2.10 RSKM GP 2.10	
			Verification 2 - The activities for software project tracking and oversight are reviewed with the project manager on both a periodic and event-driven basis.	PMC GP 2.8	Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software project tracking and oversight and reports the results.	PMC GP 2.9 PMC SP 1.4 RSKM GP 2.9	CMMI not as specific
	Software Subcontract Management	Goals	Goal 1 - The prime contractor selects qualified software subcontractors.	SAM SP 1.2	
			Goal 2 - The prime contractor and the software subcontractor agree to their commitments to each other.	SAM SG1	
			Goal 3 - The prime contractor and the software subcontractor maintain ongoing communications.	ISM SG 2 SAM SG 1	
			Goal 4 - The prime contractor tracks the software subcontractor's actual results and performance against its commitments.	ISM SG 2	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for managing software subcontracts.	ISM GP 2.1 SAM GP 2.1, 2.2	
			Commitment 2 - A subcontract manager is designated to be responsible for establishing and managing the software subcontract.	ISM GP 2.4 SAM GP 2.4	
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for selecting the software subcontractor an managing the subcontract.	ISM GP 2.3 SAM GP 2.3	
			Ability 2 - Software managers and other individuals who are involved in establishing and managing the software subcontract are trained to perform these activities.	ISM GP 2.5 OT SG 2 SAM GP 2.5	
			Ability 3 - Software managers and other individuals who are involved in managing the software subcontract receive orientation in the technical aspects of the subcontract.	SAM GP 2.5	Not directly addressed
		Activities Performed	Activity 1 - The work to be subcontracted is defined and planned according to a documented procedure.	PP SP 3.1 SAM GP 2.2, 2.7	
			Activity 2 - The software subcontractor is selected, based on an evaluation of the subcontract bidder's ability to perform the work, according to a documented procedure.	SAM SP 1.2	
			Activity 3 - The contractual agreement between the prime contractor and the software subcontractor is used as the basis for managing the subcontract.	SAM GP 2.7 SAM SG 2 SAM SP 2.2	
			Activity 4 - A documented subcontractor's software development plan is reviewed and approved by the prime contractor.		Not directly addressed
			Activity 5 - A documented and approved subcontractor's software development plan is used for tracking the software activities and communicating status.		Not directly addressed
			Activity 6 - Changes to the software subcontractors statement of work, subcontract terms and conditions, and other commitments are resolved according to a documented procedure.	ISM SP 2.2, 2.3 SAM GP 2.2 SAM SP 1.3	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Subcontract Management (cont.)		Activity 7 - The prime contractor's management conducts periodic status/coordination reviews with the software subcontractor's management.	SAM GP 2.7 SAM SP 2.2	
			Activity 8 - Periodic technical reviews and interchanges are held with the software subcontractor.	ISM SP 2.1, 2.2 SAM GP 2.7 SAM SG 2 SAM SP 2.2	
			Activity 9 - Formal reviews to address the subcontractor's software engineering accomplishments and results are conducted at selected milestones according to a documented procedure.	ISM SP 2.1, 2.2 SAM GP 2.7 SAM SP 2.2	
			Activity 10 - The prime contractor's software quality assurance group monitors the subcontractor's software quality assurance activities according to a documented procedure.		Not directly addressed
			Activity 11 - The prime contractor's software configuration management group monitors the subcontractor's activities for software configuration management according to a documented procedure.		Not directly addressed
			Activity 12 - The prime contractor conducts acceptance testing as part of the delivery of the subcontractor's software products according to a documented procedure.	SAM SP 2.3	
			Activity 13 - The software subcontractor's performance is evaluated on a periodic basis, and the evaluation is reviewed with the subcontractor.	ISM SP 2.1, 2.2 SAM SP 2.2	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the activities for managing the software subcontract.	SAM GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for managing the software subcontract are reviewed with senior management on a periodic basis.	ISM GP 2.10 SAM GP 2.10	
			Verification 2 - The activities for managing the software subcontract are reviewed with the project manager on both a periodic and event-driven basis.	SAM GP 2.8	Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the software subcontract and reports the results.	ISM GP 2.9 SAM GP 2.9	CMMI not as specific
	Software Quality Assurance	Goals	Goal 1 - Software quality assurance activities are planned.		Not directly addressed
			Goal 2 - Adherence of software products and activities to the applicable standards, procedures, and requirements is verified objectively.	PPQA SG 1	
			Goal 3 - Affected groups and individuals are informed of software quality assurance activities and results.		Not directly addressed
			Goal 4 - Noncompliance issues that cannot be resolved within the software project are addressed by senior management.	PPQA SG2	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for implementing software quality assurance (SQA).	PPQA GP 2.1 VAL GP 2.1	
		Ability to Perform	Ability 1 - A group that is responsible for coordinating and implementing SQA for the project (i.e., the SQA group) exists.	PPQA GP 2.4 VAL GP 2.3 VER GP 2.3	
			Ability 2 - Adequate resources and funding are provided for performing the SQA activities.	PPQA GP 2.3	
			Ability 3 - Members of the SQA group are trained to perform their SQA activities.	OT SG2 PPQA GP 2.5	
			Ability 4 - The members of the software project receive orientation on the role, responsibilities, authority, and value of the SQA group.	PPQA GP 2.5	
		Activities Performed	Activity 1 - A SQA plan is prepared for the software project according to a documented procedure.	PP SP 3.1 PPQA GP 2.2, 2.7 VAL GP 2.2 VER GP 2.2	
			Activity 2 - The SQA group's activities are performed in accordance with the SQA plan.		Not directly addressed

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Quality Assurance (cont.)		Activity 3 - The SQA group participates in the preparation and review of the project's software development plan, standards, and procedures.		Not directly addressed
			Activity 4 - The SQA group reviews the software engineering activities to verify compliance.	PPQA SP 1.1, 2.2	
			Activity 5 - The SQA group audits designated software work products to verify compliance.	PPQA SP 1.2,2.2 VER SP 3.1, 3.2	
			Activity 6 - The SQA group periodically reports the results of its activities to the software engineering group.	PPQA SP 2.1	Not directly addressed
			Activity 7 - Deviations identified in the software activities and software work products are documented and handled according to a documented procedure.	PPQA SP 2.1,2.2 VER SP 3.2	
			Activity 8 - The SQA group conducts periodic reviews of its activities and findings with the customer's SQA personnel, as appropriate.		Not directly addressed
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the cost and schedule status of the SQA activities.	PPQA GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The SQA activities are reviewed with senior management on a periodic basis.	PPQA GP 2.10	
			Verification 2 - The SQA activities are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - Experts independent of the SQA group periodically review the activities and software work products of the project's SQA group.	PPQA GP 2.9	CMMI not as specific
	Software Configuration Management	Goals	Goal 1 - Software configuration management activities are planned.		Not directly addressed
			Goal 2 - Selected software work products are identified, controlled, and available.	CM SG 1,2 Also, most GP 2.6	
			Goal 3 - Changes to identified software work products are controlled.	CM SG 2,3	
			Goal 4 - Affected groups and individuals are informed of the status and content of software baselines.		Not directly addressed
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for implementing software configuration management (SCM).	CM GP 2.1	
		Ability to Perform	Ability 1 - A board having the authority for managing the project's software baselines (i.e., a software configuration control board - SCCB) exists or is established.	CM GP 2.4	Not directly addressed
			Ability 2 - A group that is responsible for coordinating and implementing SCM for the project (i.e., the SCM group) exists.	CM GP 2.4	Not directly addressed
			Ability 3 - Adequate resources and funding are provided for performing the SCM activities.	CM GP 2.3	
			Ability 4 - Members of the SCM group are trained in the objectives, procedures, and methods for performing their SCM activities.	CM GP 2.5 OT SG 2	
			Ability 5 - Members of the software engineering group and other software-related groups are trained to perform their SCM activities.	CM GP 2.5	
		Activities Performed	Activity 1 - A SCM plan is prepared for each software project according to a documented procedure.	CM GP 2.2, 2.7 PP SP 3.1	
			Activity 2 - A documented and approved SCM plan is used as the basis for performing the SCM activities.	CM GP 2.2, 2.7 PP SP 3.1	
			Activity 3 - A configuration management library system is established as a repository for the software baselines.	CM SP 1.2	
			Activity 4 - The software work products to be placed under configuration management are identified.	CM SP 1.1, 3.1	
			Activity 5 - Change requests and problem reports for all configuration items/units are initiated, recorded, reviewed, approved, and tracked according to a documented procedure.	CM SP 1.2, 2.1, 2.2 PI SP 2.2 RM SP 1.3	
			Activity 6 - Changes to baselines are controlled according to a documented procedure.	CM SP 2.2	

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Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
2 Repeatable (cont.)	Software Configuration Management (cont.)		Activity 7 - Products from the software baseline library are created and their release is controlled according to a documented procedure.	CM SP 1.3	
			Activity 8 - The status of configuration items/units is recorded according to a documented procedure.	CM SP 3.1	
			Activity 9 - Standard reports documenting the SCM activities and the contents of the software baseline are developed and made available to affected groups and individuals.	CM GP 2.7,2.9	Not directly addressed
			Activity 10 - Software baseline audits are conducted according to a documented procedure.	CM SP 3.2	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the SCM activities.	CM GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The SCM activities are reviewed with senior management on a periodic basis.	CM GP 2.10	
			Verification 2 - The SCM activities are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The SCM group periodically audits software baselines to verify that they conform to the documentation that defines them.	CM SP 3.2	
			Verification 4 - The software quality assurance group reviews and/or audits the activities and work products for SCM and reports the results.	CM GP 2.9	CMMI not as specific
3 Defined					
	Organization Process Focus	Goals	Goal 1 - Software process development and improvement activities are coordinated across the organization.		Not directly addressed
			Goal 2 - The strengths and weaknesses of the software processes used are identified relative to a process standard.	OPF SG 1	
			Goal 3 - Organization-level process development and improvement activities are planned.	OPF SG 2	
		Commitment to Perform	Commitment 1 - The organization follows a written organizational policy for coordinating software process development and improvement activities across the organization.	OPF GP 2.1	
			Commitment 2 - Senior management sponsors the organization's activities for software process development and improvement.		Not directly addressed
			Commitment 3 - Senior management oversees the organization's activities for software process development and improvement.		Not directly addressed
		Ability to Perform	Ability 1 - A group that is responsible for the organization's software process activities exists.	OPF GP 2.4	
			Ability 2 - Adequate resources and funding are provided for the organization's software process activities.	OPF GP 2.3	
			Ability 3 - Members of the group responsible for the organization's software process activities receive required training to perform these activities.	M&A GP 2.5 OPF GP 2.5 OT SG2	
			Ability 4 - Members of the software engineering group and other software-related groups receive orientation on the organization's software process activities and their roles in those activities.	OPF GP 2.5	
		Activities Performed	Activity 1 - The software process is assessed periodically, and action plans are developed to address the assessment findings.	OPF SP 1.2, 1.3, 2.1	
			Activity 2 - The organization develops and maintains a plan for its software process development and improvement activities.	M&A GP 2.2 OPF GP 2.2, 3.1 OPF SG 2 OPF SP 2.1	
			Activity 3 - The organization's and projects' activities for developing and improving their software processes are coordinated at the organization level.	OPF SP 2.1, 2.2	
			Activity 4 - The use of the organization's software process database is coordinated at the organization level.	Most Level 3 and higher GP 3.2	Not directly addressed
			Activity 5 - New processes, methods, and tools in limited use in the organization are monitored, evaluated, and, where appropriate, transferred to other parts of the organization.	OID SP 1.4 OPF SP 1.3, 2.3	
			Activity 6 - Training for the organization's and projects' software processes is coordinated across the organization.		Not directly addressed

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Organization Process Focus (cont.)		Activity 7 - The groups involved in implementing the software processes are informed of the organization's and projects' activities for software process development and improvement.	OPF GP 2.7	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the organization's process development and improvement activities.	OPF GP 2.8, 3.2	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for software process development and improvement are reviewed with senior management on a periodic basis.	OPF GP 2.10	
	Organization Process Definition	Goals	Goal 1 - A standard software process for the organization is developed and maintained.		Not directly addressed
			Goal 2 - Information related to the use of the organization's standard software process by the software projects is collected, reviewed, and made available.		Not directly addressed
		Commitment to Perform	Commitment 1 - The organization follows a written policy for developing and maintaining a standard software process and related process assets.	OPD GP 2.1	
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for developing and maintaining the organization's standard software process and related process assets.	OPD GP 2.3	
			Ability 2 - The individuals who develop and maintain the organization's standard software process and related process assets receive required training to perform these activities.	OPD GP 2.5 OT SG 2	
		Activities Performed	Activity 1 - The organization's standard software process is developed and maintained according to a documented procedure.	OPD GP 2.2, 3.1 OPD SP 1.1 OPP GP 3.1 VER GP 3.1	
			Activity 2 - The organization's standard software process is documented according to established organization standards.	OPD GP 2.6, 3.1 OPD SP 1.1 OPP GP 3.1 VER GP 3.1	
			Activity 3 - Descriptions of software life cycles that are approved for use by the projects are documented and maintained.	OPD GP 2.6 OPD SP 1.3 PI GP 3.1 RD GP 3.1 TS GP 3.1 RSKM GP 3.1 VAL GP 3.1	
			Activity 4 - Guidelines and criteria for the projects' tailoring of the organization's standard software process are developed and maintained.	OPD GP 2.6 OPD SP 1.2 PI GP 3.1 RD GP 3.1 TS GP 3.1 RSKM GP 3.1 VAL GP 3.1	
			Activity 5 - The organization's software process database is established and maintained.	IPM SP 1.5 M&A SP 2.3 OPD SG 1 OPD GP 2.6, 3.2 OPD SP 1.4, 1.5 OPF SP 2.4 Also, most Level 3 and higher GP 3.2	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Organization Process Definition (cont.)		Activity 6 - A library of software process-related documentation is established and maintained.	IPM SP 1.5 OPD GP 2.6 OPD SG 1 OPD SP 1.5 OPF SP 2.4	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the organization's process definition activities.	OPD GP 2.8,3.2	CMMI not as specific
		Verifying Implementation	Verification 1 - The software quality assurance group reviews and/or audits the organization's activities and work products for developing and maintaining the organization's standard software process and related process assets and reports the results.	OPD GP 2.9	CMMI not as specific
	Training Program	Goals	Goal 1 - Training activities are planned.		Not directly addressed
			Goal 2 - Training for developing the skills and knowledge needed to perform software management and technical roles is provided.	OT SG 1	
			Goal 3 - Individuals in the software engineering group and software-related groups receive the training necessary to perform their roles.	OT SG 2	
		Commitment to Perform	Commitment 1 - The organization follows a written policy for meeting its training needs.	OT GP 2.1	
		Ability to Perform	Ability 1 - A group responsible for fulfilling the training needs of the organization exists.	OT GP 2.4	
			Ability 2 - Adequate resources and funding are provided for implementing the training program.	OT GP 2.3 OT SP 1.4	
			Ability 3 - Members of the training group have the necessary skills and knowledge to perform their training activities.	OT GP 2.5 OT SP 1.4	
			Ability 4 - Software managers receive orientation on the training program.	OT GP 2.5	
		Activities Performed	Activity 1 - Each software project develops and maintains a training plan that specifies its training needs.	PP SP 2.5, 3.1	
			Activity 2 - The organization's training plan is developed and revised according to a documented procedure.	OT GP 2.2 ,2.7, 3.1 OT SP 1.1, 1.2, 1.3	
			Activity 3 - The training for the organization is performed in accordance with the organization's training plan.	OT SP 2.1	
			Activity 4 - Training courses prepared at the organization level are developed and maintained according to organization standards.		Not directly addressed
			Activity 5 - A waiver procedure for required training is established and used to determine whether individuals already possess the knowledge and skills required to perform in their designated roles.		Not directly addressed
			Activity 6 - Records of training are maintained.	OT SP 2.2	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the training program activities.	OT GP 2.8, 3.2	CMMI not as specific
			Measurement 2 - Measurements are made and used to determine the quality of the training program.	OT GP 2.8, 3.2 OT SP 2.3	
		Verifying Implementation	Verification 1 - The training program activities are reviewed with senior management on a periodic basis.	OT GP 2.10	
			Verification 2 - The training program is independently evaluated on a periodic basis for consistency with, and relevance to, the organization's needs.	OT GP 2.9 OT SP 2.3	
			Verification 3 - The training program activities and work products are reviewed and/or audited and the results are reported.	OT GP 2.9	
	Integrated Software Management	Goals	Goal 1 - The project's defined software process is a tailored version of the organization's standard software process.	IPM SG 1	
			Goal 2 - The project is planned and managed according to the project's defined software process.	IPM SG 1	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Integrated Software Management (cont.)	Commitment to Perform	Commitment 1 - The project follows a written organizational policy requiring that the software project be planned and managed using the organization's standard software process and related process assets.	IPM GP 2.1 RSKM GP 2.1	
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for managing the software project using the project's defined software process.	IPM GP 2.3 RSKM GP 2.3	
			Ability 2 - The individuals responsible for developing the project's defined software process receive required training in how to tailor the organization's standard software process and use the related process assets.	IPM GP 2.5 OT SG 2 RSKM GP 2.5	
			Ability 3 - The software managers receive required training in managing the technical, administrative, and personnel aspects of the software project based on the project's defined software process.	IPM GP 2.5 OT SG 2 RSKM GP 2.5	
		Activities Performed	Activity 1 - The project's defined software process is developed by tailoring the organization's standard software process according to a documented procedure.	IPM SP 1.1	
			Activity 2 - Each project's defined software process is revised according to a documented procedure.	IPM GP 2.2, 3.1 IPM SP 1.1 RSKM GP 2.2	
			Activity 3 - The project's software development plan, which describes the use of the project's defined software process, is developed and revised according to a documented procedure.	IPM GP 2.2 PP SP 2.7 RSKM GP 2.2	
			Activity 4 - The software project is managed in accordance with the project's defined software process.	IPM SP 1.4 PP SP 2.5	
			Activity 5 - The organization's software process database is used for software planning and estimating.	IPM SP 1.2, 1.5 OPF SP 2.4	
			Activity 6 - The size of the software work products (or size of changes to the software work products) is managed according to a documented procedure.	PMC SP 1.1 RSKM SP 2.1 TS SP 2.4	
			Activity 7 - The project's software effort and costs are managed according to a documented procedure.		Not directly addressed
			Activity 8 - The project's critical computer resources are managed according to a documented procedure.		Not directly addressed
			Activity 9 - The critical dependencies and critical paths of the project's software schedule are managed according to a documented procedure.	IPM GP 2.7 IPM SP 1.4 PMC GP 2.7 PMC SP 1.5	
			Activity 10 - The project's software risks are identified, assessed, documented, and managed according to a documented procedure.	IPM GP 2.7 PMC SP 1.3 RSKM GP 2.7 RSKM SG 2, 3 RSKM SP 1.1, 1.3, 2.1, 2.2, 3.1, 3.2	
			Activity 11 - Reviews of the software project are periodically performed to determine the actions needed to bring the software project's performance and results in line with the current and projected needs of the business, customer, and end users, as appropriate.	IPM GP 2.7 IPM SG 2 IPM SP 1.4 PMC GP 2.7 PCM SP 1.5, 1.6	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the effectiveness of the integrated software management activities.	IPM GP 2.8 RSKM GP 2.8	CMMI not as specific
		Verifying Implementation	Verification 1 - The activities for managing the software project are reviewed with senior management on a periodic basis.	IPM GP 2.10 RSKM GP 2.10	
			Verification 2 - The activities for managing the software project are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for managing the software project and reports the results.	IPM GP 2.9 RSKM GP 2.9	CMMI not as specific

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Software Product Engineering	Goals	Goal 1 - The software engineering tasks are defined, integrated, and consistently performed to produce the software.		Not directly addressed
			Goal 2 - Software work products are kept consistent with each other.		Not directly addressed
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for performing the software engineering activities.	TS GP 2.1 VAL GP 2.1 VER GP 2.1	Not directly addressed
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for performing the software engineering task.	PI GP 2.3 PP SP 2.4 RD GP 2.3 TS GP 2.3 VAL GP 2.3 VAL SP 1.2 VER GP 2.3	
			Ability 2 - Members of the software engineering technical staff receive required training to perform their technical assignments.	OT SG 2 PI GP 2.5 RD GP 2.5 TS GP 2.5 VAL GP 2.5 VER GP 2.5	
			Ability 3 - Members of the software engineering technical staff receive orientation in related software engineering disciplines.	PI GP 2.5 TS GP 2.5 VAL GP 2.5 VER GP 2.5	
			Ability 4 - The project manager and all software managers receive orientation in the technical aspects of the software project.	PI GP 2.5 VAL GP 2.5 VER GP 2.5	Not directly addressed
		Activities Performed	Activity 1 - Appropriate software engineering methods and tools are integrated into the project's defined software process.	VAL SP 1.2	Not directly addressed
			Activity 2 - The software requirements are developed, maintained, documented, and verified by systematically analyzing the allocated requirements according to the project's defined software process.	RD SG 1, 2, 3 RD GP 2.7 RD SP 1.1, 1.2, 2.1, 3.1, 3.2, 3.3, 3.4, 3.5 RM SP 1.1, 1.2, 1.3 VAL GP 2.7 VAL SP 1.1	
			Activity 3 - The software design is developed, maintained, documented, and verified, according to the project's defined software process, to accommodate the software requirements and to form the framework for coding.	PI SG 2 PI SP 2.1, 2.2 RD GP 2.2 RD SG 3 RD SP 2.2, 2.3 TS GP 2.7 TS SG 2 TS SP 2.1, 2.2, 2.3	
			Activity 4 - The software code is developed, maintained, documented, and verified, according to the project's defined software process, to implement the software requirements and software design.	PI SG 1 PI SP 1.1 TS SG 3 TS SP 3.1	

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Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Software Product Engineering (cont.)		Activity 5 - Software testing is performed according to the project's defined software process.	PI GP 2.7 PI SG 3 VER GP 2.7 VER SP 1.1, 3.1	
			Activity 6 - Integration testing of the software is planned and performed according to the project's defined software process.	PI GP 2.7 PI SG 1, 3 PI SP 1.1, 3.2, 3.3 VER GP 2.7 VER SP 1.1, 1.3, 3.1	
			Activity 7 - System and acceptance testing of the software are planned and performed to demonstrate that the software satisfies its requirements.	PI SG 3 PI SP 1.2, 3.3 VER SP 1.1, 1.2, 3.1, 3.2 VAL GP 2.7 VAL SP 1.1, 1.3, 2.1, 2.2	
			Activity 8 - The documentation that will be used to operate and maintain the software is developed and maintained according to the project's defined software process.	TS SG 3 TS SP 3.2	
			Activity 9 - Data on defects identified in peer reviews and testing are collected and analyzed according to the project's defined software process.	CAR SG 1 CAR SP 1.1 VER SP 2.3, 3.2	
			Activity 10 - Consistency is maintained across software work products, including the software plans, process descriptions, allocated requirements, software requirements, software design, code, test plans, and test procedures.	PI SP 2.2 RM SP 1.3, 1.4, 1.5	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine to functionality and quality of the software products.	PPQA SP 1.2	CMMI not as specific
			Measurement 2 - Measurements are made and used to determine the status of the software product engineering activities.	PI GP 2.8 PPQA SP 1.1 RD GP 2.8 TS GP 2.8 VAL GP 2.8 VER GP 2.8	Not directly addressed
		Verifying Implementation	Verification 1 - The activities for software product engineering are reviewed with senior management on a periodic basis.	PI GP 2.10 RD GP 2.10 TS GP 2.10 VAL GP 2.10 VER GP 2.10	
			Verification 2 - The activities for software product engineering are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software product engineering and reports the results.	PI GP 2.9 PPQA SP 1.1, 1.2 RD GP 2.9 TS GP 2.9 VAL GP 2.9 VER GP 2.9, 2.10	CMMI not as specific regarding SQA Group
	Intergroup Coordination	Goals	Goal 1 - The customer's requirements are agreed to by all affected groups.	RM SP 1.2	
			Goal 2 - The commitments between the engineering groups are agreed to by the affected groups.	PP SG 3	
			Goal 3 - The engineering groups identify, track, and resolve intergroup issues.	IPM SG 2	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for establishing interdisciplinary engineering teams.		Not directly addressed

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Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Intergroup Coordination (cont.)	Ability to Perform	Ability 1 - Adequate resources and funding are provided for coordinating the software engineering activities with other engineering groups.		Not directly addressed
			Ability 2 - The support tools used by the different engineering groups are compatible to enable effective communication and coordination.		Not directly addressed
			Ability 3 - All managers in the organization receive required training in teamwork.	OT SG 2	
			Ability 4 - All task leaders in each engineering group receive orientation in the processes, methods, and standards used by the other engineering groups.		Not directly addressed
			Ability 5 - The members of the engineering groups receive orientation in working as a team.		Not directly addressed
		Activities Performed	Activity 1 - The software engineering group and the other engineering groups participate with the customer and end users, as appropriate, to establish the system requirements.	IPM SP 2.1 RD GP 2.7 RD SP 1.1, 1.2 RM SP 1.1	
			Activity 2 - Representatives of the project's software engineering group work with representatives of the other engineering groups to monitor and coordinate technical activities and resolve technical issues.	IPM SG 2 IPM SP 2.1, 2.2, 2.3 IT SP 2.4	
			Activity 3 - A documented plan is used to communicate intergroup commitments and to coordinate and track the work performed.	IPM GP 2.2 IPM SP 2.1, 2.2 PP SP 3.3	
			Activity 4 - Critical dependencies between engineering groups are identified, negotiated, and tracked according to a documented procedure.	IPM SG 2 IPM SP 2.2 IT SP 2.4 PP SP 3.3	
			Activity 5 - Work products produced as inputs to other engineering groups are reviewed by representatives of the receiving groups to ensure that the work products meet their needs.	PI SP 3.1	
			Activity 6 - Intergroup issues not resolvable by the individual representatives of the project engineering groups are handled according to a documented procedure.	IPM SP 2.3 PP SP 3.3	
			Activity 7 - Representatives of the project engineering groups conduct periodic technical reviews and interchanges.	IPM SP 2.1, 2.2 IPM SG2 IT SP 2.4	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the intergroup coordination activities.		Not directly addressed
		Verifying Implementation	Verification 1 - The activities for intergroup coordination are reviewed with senior management on a periodic basis.		Not directly addressed
			Verification 2 - The activities for intergroup coordination are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for intergroup coordination and reports the results.		Not directly addressed
	Peer Reviews	Goals	Goal 1 - Peer review activities are planned.		Not directly addressed
			Goal 2 - Defects in the software work products are identified and removed.		Not directly addressed
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for performing peer reviews.	VER GP 2.1	
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for performing peer reviews on each software work product to be reviewed.	VAL GP 2.3 VER GP 2.3	
			Ability 2 - Peer review leaders receive required training in how to lead peer reviews.	OT SG 2 VAL GP 2.5 VER GP 2.5	
			Ability 3 - Reviewers who participate in peer reviews receive required training in the objectives, principles, and methods of peer reviews.	OT SG 2 VAL GP 2.5 VER GP 2.5	

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Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
3 Defined (cont.)	Peer Reviews (cont.)	Activities Performed	Activity 1 - Peer reviews are planned, and the plans are documented.	VER GP 2.2 VER SG 1 VER SP 2.1	
			Activity 2 - Peer reviews are performed according to a documented procedure.	VER SG 1, 2 VER SP 2.2	
			Activity 3 - Data on the conduct and results of the peer reviews are recorded.	VER SP 2.2, 2.3	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the peer review activities.	VAL GP 2.8, 3.2 VER GP 2.8, 3.2	CMMI not as specific regarding Measurements
		Verifying Implementation	Verification 1 - The software quality assurance group reviews and/or audits the activities and work products for peer reviews and reports the results.	VAL GP 2.9 VER GP 2.9	CMMI not as specific regarding SQA Group
4 Managed					
	Quantitative Process Management	Goals	Goal 1 - The quantitative process management activities are planned.		Not directly addressed
			Goal 2 - The process performance of the project's defined software process is controlled quantitatively.	QPM SG 2	
			Goal 3 - The process capability of the organization's standard software process is known in quantitative terms.	OPP SG 1	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for measuring and quantitatively controlling the performance of the project's defined software process.	M&A GP 2.1 OPP GP 2.1 QPM GP 2.1	
			Commitment 2 - The organization follows a written policy for analyzing the process capability of the organization's standard software process.	M&A SP 1.1 OPP GP 2.1	
		Ability to Perform	Ability 1 - A group that is responsible for coordinating the quantitative process management activities for the organization exists.	OPP GP 2.4 QPM GP 2.4	Not directly addressed
			Ability 2 - Adequate resources and funding are provided for the quantitative process management activities.	M&A GP 2.3 OPP GP 2.3 QPM GP 2.3	
			Ability 3 - Support exists for collecting, recording, and analyzing data for selected process and product measurements.	M&A GP 2.3 OPP GP 2.3	
			Ability 4 - The individuals implementing or supporting quantitative process management receive required training to perform these activities.	M&A GP 2.5 OPP GP 2.5 OT SG 2 QPM GP 2.5	
			Ability 5 - The members of the software engineering group and other software-related groups receive orientation on the goals and value of quantitative process management.	OPP GP 2.5 OT SG 2 QPM GP 2.5	
		Activities Performed	Activity 1 - The software project's plan for quantitative process management is developed according to a documented procedure.	M&A SP 1.1 M&A GP 2.2 OPP GP 2.2, 2.7 OPP SP 1.3 PP SP 2.3, 3.1 QPM GP 2.2, 2.7, 3.1 QPM SP 1.1	
			Activity 2 - The software project's quantitative process management activities are performed in accordance with the project's quantitative process management plan.	OPP GP 2.7 OPP SP 1.1 PP SP 2.3 QPM SP 1.1, 1.3, 1.4, 2.1 QPM GP 2.7	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
4 Managed (cont.)	Quantitative Process Management (cont.)		Activity 3 - The strategy for the data collection and quantitative analysis to be performed are determined based on the project's defined software process.	M&A SP 1.2, 1.3, 1.4 PP SP 2.3 QPM SP 1.3, 2.1	
			Activity 4 - The measurement data used to control the project's defined software process quantitatively are collected according to a documented procedure.	M&A SP 1.3, 2.1, 2.3 OPP SP 1.2	
			Activity 5 - The project's defined software process is analyzed and brought under quantitative control according to a documented procedure.	M&A SP 1.4, 2.2 QPM SP 1.4, 2.1, 2.2, 2.3 VER SP 2.3	
			Activity 6 - Reports documenting the results of the software project's quantitative process management activities are prepared and distributed.	M&A SP 1.4, 2.4	
			Activity 7 - The process capability baseline for the organization's standard software process is established and maintained according to a documented procedure.	CAR SP 2.2 OPP SP 1.1, 1.4, 1.5 QPM SP 2.4	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the activities for quantitative process management.	OPP GP 2.8, 3.2 QPM GP 2.8, 3.2	CMMI not as specific regarding Measurements
		Verifying Implementation	Verification 1 - The activities for quantitative process management are reviewed with senior management on a periodic basis.	OPP GP 2.10 QPM GP 2.10	
			Verification 2 - The software project's activities for quantitative process management are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for quantitative process management and reports the results.	OPP GP 2.9 QPM GP 2.9	CMMI not as specific regarding SQA Group
	Software Quality Management	Goals	Goal 1 - The project's software quality management activities are planned.		Not directly addressed
			Goal 2 - Measurable goals for software product quality and their priorities are defined.		Not directly addressed
			Goal 3 - Actual progress toward achieving the quality goals for the software products is quantified and managed.	QPM SG 1	
		Commitment to Perform	Commitment 1 - The project follows a written organizational policy for managing software quality.	QPM GP 2.1	
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for managing the quality of the software products.	M&A GP 2.3 QPM GP 2.3	
			Ability 2 - The individuals implementing and supporting software quality management receive required training to perform their activities.	M&A GP 2.5 OPP GP 2.5 OT SG 2	
			Ability 3 - The members of the software engineering group and other software-related groups receive required training in software quality management.	M&A GP 2.5 OPP GP 2.5 OT SG 2	
		Activities Performed	Activity 1 - The project's software quality plan is developed and maintained according to a documented procedure.	M&A GP 2.2, 2.7 OPP GP 2.2 OPP SP 1.3 PP SP 3.1 PPQA GP 2.2 QPM GP 2.2, 2.7 QPM SP 1.1	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
4 Managed (cont.)	Software Quality Management (cont.)		Activity 2 - The project's software quality plan is the basis for the project's activities for software quality management.	M&A GP 2.2 OPP GP 2.2 OPP SP 1.3 PPQA GP 2.2 QPM GP 2.2 QPM SP 2.1	
			Activity 3 - The project's quantitative quality goals for the software products are defined, monitored, and revised throughout the software life cycle.	QPM SP 1.1, 1.4	
			Activity 4 - The quality of the project's software products is measured, analyzed, and compared to the product's quantitative quality goals on an event-driven basis.	IPM SP 2.3 QPM GP 2.7 QPM SP 1.1, 1.4	
			Activity 5 - The software project's quantitative quality goals for the products are allocated appropriately to the subcontractors delivering software products to the project.		Not directly addressed
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the software quality management activities.	OPP GP 2.8, 3.2	CMMI not as specific regarding Measurements
		Verifying Implementation	Verification 1 - The activities for software quality management are reviewed with senior management on a periodic basis.	OPP GP 2.10	
			Verification 2 - The activities for software quality management are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for software quality management and reports the results.	OPP GP 2.9	CMMI not as specific regarding SQA Group or SQM
5 Optimizing					
	Defect Prevention	Goals	Goal 1 - Defect prevention activities are planned.		Not directly addressed
			Goal 2 - Common causes of defects are sought out and identified.	CAR SG 1	
			Goal 3 - Common causes of defects are prioritized and systematically eliminated.	CAR SG 2	
		Commitment to Perform	Commitment 1 - The organization follows a written policy for defect prevention activities.	CAR GP 2.1	
			Commitment 2 - The project follows a written organizational policy for defect prevention activities.	CAR GP 2.1	
		Ability to Perform	Ability 1 - An organization-level team to coordinate defect prevention activities exists.	CAR GP 2.4, 2.7	
			Ability 2 - A team to coordinate defect prevention activities for the software project exists.	CAR GP 2.4, 2.7	Not directly addressed
			Ability 3 - Adequate resources and funding are provided for defect prevention activities at the project and organization levels.	CAR GP 2.3, 2.7	
			Ability 4 - Members of the software engineering group and other software-related groups receive required training to perform their defect prevention activities.	CAR GP 2.5 OT SG 2	
		Activities Performed	Activity 1 - The software project develops and maintains a plan for its defect prevention activities.	CAR GP 2.2 PP SP 3.1	
			Activity 2 - At the beginning of a software task, the members of the team performing the task meet to prepare for the activities of that task and the related defect prevention activities.	CAR GP 2.7	Not directly addressed
			Activity 3 - Casual analysis meetings are conducted according to a documented procedure.	CAR GP 2.7 CAR SP 1.1, 1.2	
			Activity 4 - Each of the teams assigned to coordinate defect prevention activities meets on a periodic basis to review and coordinate implementation of action proposals from the casual analysis meetings.	CAR GP 2.7 CAR SP 2.2 OID SP 2.2	
			Activity 5 - Defect prevention data are documented and tracked across the teams coordinating defect prevention activities.	CAR SP 2.3	
			Activity 6 - Revisions to the organization's standard software process resulting from defect prevention actions are incorporated according to a documented procedure.		Not addressed
			Activity 7 - Revisions to the project's defined software process resulting from defect prevention actions are incorporated according to a documented procedure.	CAR SP 2.1	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
5 Optomizing (cont.)	Defect Prevention (cont.)		Activity 8 - Members of the software engineering group and software-related groups receive feedback on the status and results of the organization's and project's defect prevention activities on a periodic basis.		Not directly addressed
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the defect prevention activities.	CAR GP 2.8, 3.2	CMMI not as specific regarding Measurements
		Verifying Implementation	Verification 1 - The organization's activities for defect prevention are reviewed with senior management on a periodic basis.	CAR GP 2.10	
			Verification 2 - The software project's activities for defect prevention are reviewed with the project manager on both a periodic and event-driven basis.		Not directly addressed
			Verification 3 - The software quality assurance group reviews and/or audits the activities and work products for defect prevention and reports the results.	CAR GP 2.9	CMMI not as specific regarding SQA Group
	Technology Change Management	Goals	Goal 1 - Incorporation of technology changes are planned.		Not directly addressed
			Goal 2 - New technologies are evaluated to determine their effect on quality and productivity.		Not directly addressed
			Goal 3 - Appropriate new technologies are transferred into normal practice across the organization.		Not directly addressed
		Commitment to Perform	Commitment 1 - The organization follows a written policy for improving its technology capability.	OID GP 2.1	
			Commitment 2 - Senior management sponsors the organization's activities for technology change management.		Not directly addressed
			Commitment 3 - Senior management oversees the organization's technology change management activities.		Not directly addressed
		Ability to Perform	Ability 1 - A group responsible for the organization's technology change management activities exists.	OID GP 2.4	Not directly addressed
			Ability 2 - Adequate resources and funding are provided to establish and staff a group responsible for the organization's technology change management activities.	OID GP 2.3	
			Ability 3 - Support exists for collecting and analyzing data needed to evaluate technology changes.	OID GP 2.3	
			Ability 4 - Appropriate data on the software processes and software work products are available to support analyses performed to evaluate and select technology changes.	M&A SG 2	
			Ability 5 - Members of the group responsible for the organization's technology change management activities receive required training to perform these activities.	OID GP 2.5 OT SG 2	
		Activities Performed	Activity 1 - The organization develops and maintains a plan for technology change management.	OID GP 2.2, 3.1 OID SP 2.1 PP SP 3.1	
			Activity 2 - The group responsible for the organization's technology change management activities works with the software projects in identifying areas of technology change.	OID SP 1.1, 1.2 OPF SP 1.3	CMMI not as specific
			Activity 3 - Software managers and technical staff are kept informed of new technologies.	OID GP 2.7	
			Activity 4 - The group responsible for the organization's technology change management systematically analyzes the organization's standard software process to identify areas that need or could benefit from new technology.	OID SP 1.1, 1.2 OPF SP 1.3	CMMI not as specific
			Activity 5 - Technologies are selected and acquired for the organization and software projects according to a documented procedure.	OID GP 2.2, 2.7 OID SG 1 OID SP 1.4, 2.2	
			Activity 6 - Pilot efforts for improving technology are conducted, where appropriate, before a new technology is introduced into normal practice.	OID GP 2.7 OID SP 1.3, 2.2	
			Activity 7 - Appropriate new technologies are incorporated into the organization's standard software process according to a documented procedure.	OID SP 2.1, 2.2	
			Activity 8 - Appropriate new technologies are incorporated into the projects' defined software processes according to a documented procedure.	OID SP 2.2	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the organization's activities for technology change management.	OID GP 2.8, 3.2 OID SP 2.3	

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Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
5 Optimizing (cont.)	Technology Change Management (cont.)	Verifying Implementation	Verification 1 - The organization's activities for technology change management are reviewed with senior management on a periodic basis.	OID GP 2.10	
			Verification 2 - The software quality assurance group reviews and/or audits the activities and work products for technology change management and reports the results.	OID GP 2.9	CMMI not as specific regarding SQA Group
	Process Change Management	Goals	Goal 1 - Continuous process improvement is planned.		Not directly addressed
			Goal 2 - Participation in the organization's software process improvement activities is organization wide.		Not directly addressed
			Goal 3 - The organization's standard software process and the projects' defined software processes are improved continuously.	OID SG 2	
		Commitment to Perform	Commitment 1 - The organization follows a written policy for implementing software process improvement.	OID GP 2.1	
			Commitment 2 - Senior management sponsors the organization's activities for software process improvement.		Not directly addressed
		Ability to Perform	Ability 1 - Adequate resources and funding are provided for software process improvement activities.	OID GP 2.3	
			Ability 2 - Software managers receive required training in software process improvement.	OID GP 2.5 OT SG 2	
			Ability 3 - The managers and technical staff of the software engineering group and other software-related groups receive required training in software process improvement.	OID GP 2.5 OT SG 2	
			Ability 4 - Senior management receives required training in software process improvement.	OID GP 2.5 OT SG 2	
		Activities Performed	Activity 1 - A software process improvement program is established which empowers the members of the organization to improve the processes of the organization.		Not directly addressed
			Activity 2 - The group responsible for the organization's software process activities (e.g., software process engineering group) coordinates the software process improvement activities.	OID GP 2.4	
			Activity 3 - The organization develops and maintains a plan for software process improvement according to a documented procedure.	OID GP 2.2, 2.7, 3.1 OID SP 2.1 PP SP 3.1	
			Activity 4 - The software process improvement activities are performed in accordance with the software process improvement plan.	OID GP 2.7 OPF SP 2.1, 2.2	
			Activity 5 - Software process improvement proposals are handled according to a documented procedure.	OID SP 1.1, 1.4, 2.1, 2.2	
			Activity 6 - Members of the organization actively participate in teams to develop software process improvements for assigned process areas.	OID GP 2.7	
			Activity 7 - Where appropriate, the software process improvements are installed on a pilot basis to determine their benefits and effectiveness before they are introduced into normal practice.	CAR SP 2.2 OID SP 1.3, 2.2	
			Activity 8 - When the decision is made to transfer a software process improvement into normal practice, the improvement is implemented according to a documented procedure.	OID SP 2.1, 2.2	
			Activity 9 - Records of software process improvement activities are maintained.	CAR SP 2.3 OID SP 2.3	
			Activity 10 - Software managers and technical staff receive feedback on the status and results of the software process improvement activities on an event-driven basis.	OID GP 2.7	
		Measurement and Analysis	Measurement 1 - Measurements are made and used to determine the status of the software process improvement activities.	OID GP 2.8, 3.2 OID SP 2.3	
		Verifying Implementation	Verification 1 - The activities for software process improvement are reviewed with senior management on a periodic basis.	OID GP 2.10	

Mapping of SW-CMM V. 1.1 to CMMI-SE/SW/IPPD V. 1.1 QA3 Staged

Level		Common Feature	Goals and Common Feature	CMMI Process Area & Activity or Goal & Specific Practice	Comments
5 Optimizing (cont.)	Process Change Management (cont.)		Verification 2 - The software quality assurance group reviews and/or audits the activities and work products for software process improvement and reports the results.	OID GP 2.9	CMMI not as specific regarding SQA Group